February 1988 $2.95
Canada $3.95

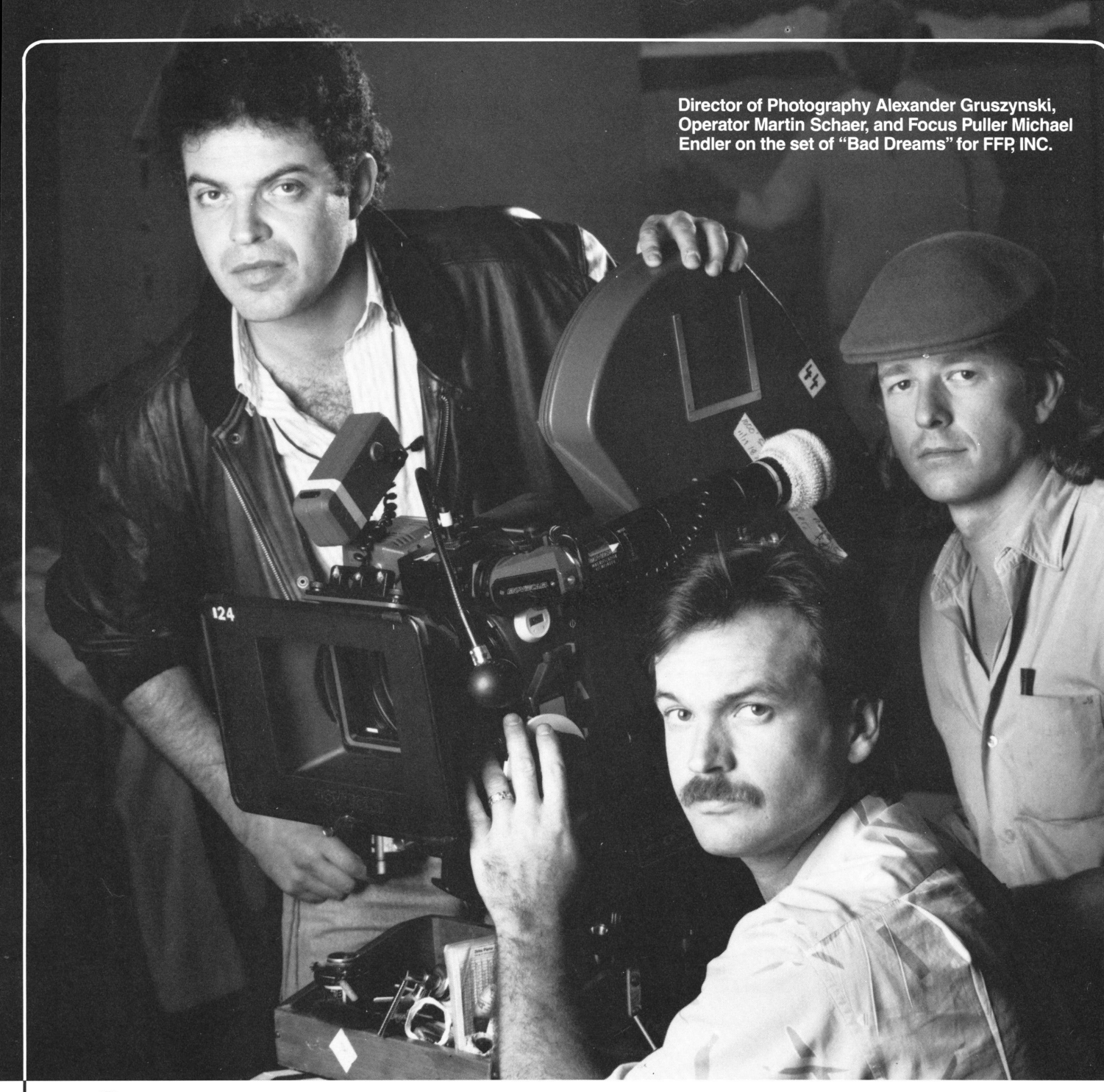
Yahoo!—*Once Upon a Texas Train*

American Cinematographer



White Zombie: Ugly Duckling Becomes a Swan
*Earth*Star Voyager*—Television's Latest Space Trip

0 74470 12797 0 20



Director of Photography Alexander Gruszynski, Operator Martin Schaer, and Focus Puller Michael Endler on the set of "Bad Dreams" for FFP, INC.

QUIET RELIABILITY.

Director of Photography Alexander Gruszynski was wrapping his sixth film shot with Moviecam. And once again he was completely satisfied.

The camera gear had run smoothly for eight weeks of continuous shooting, under every condition. Says Alexander, "Last winter we shot outside with a windchill factor of −5°. Then we worked in the damp Louisiana bayous with temperatures in the 100's. I am delighted that a camera with such sophisticated electronics is consistently reliable, even in such extreme weather."

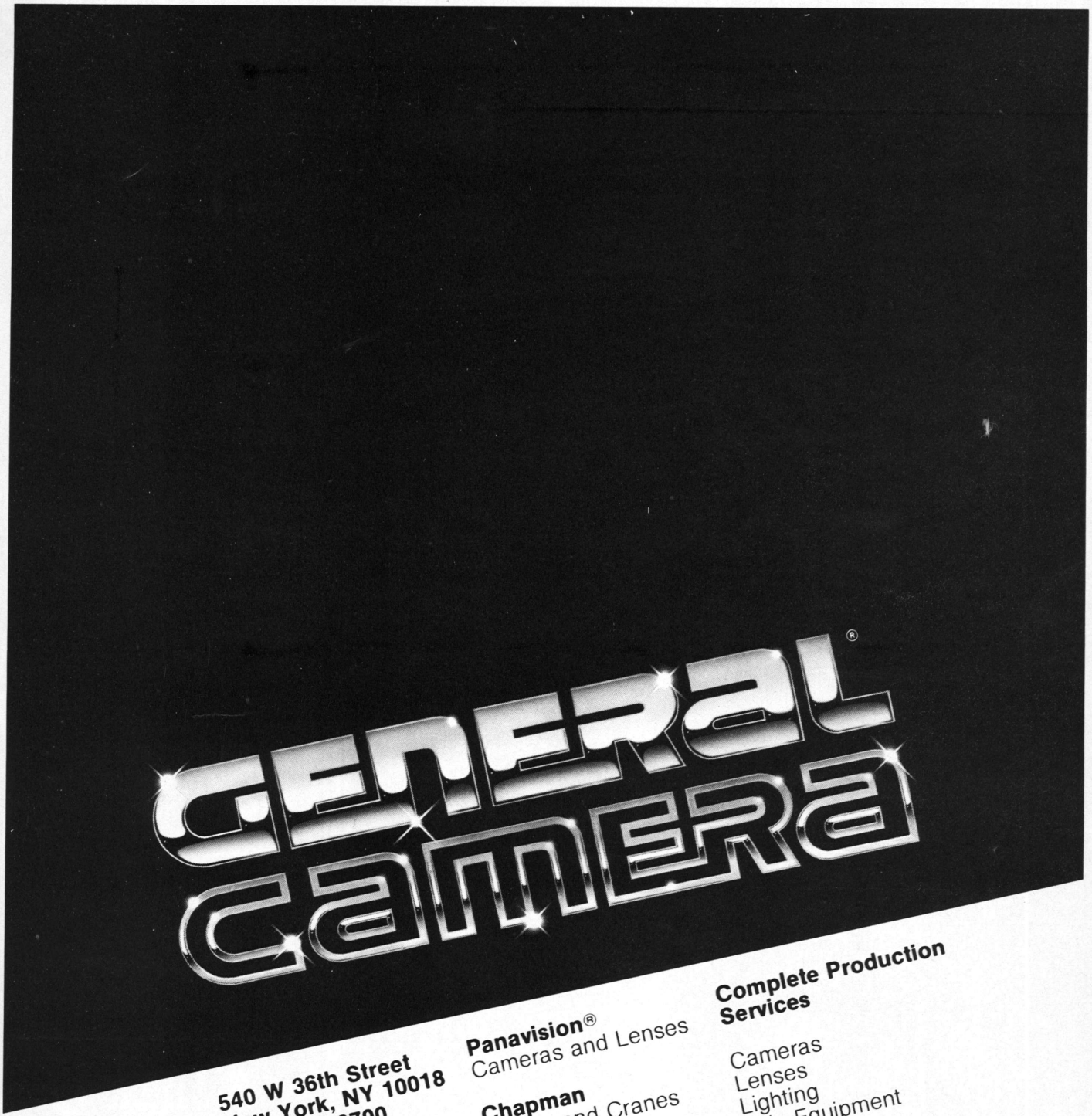
On the sound stage, Alexander peered through the Moviecam Super America camera. He explained, "What's crucial to me is that Moviecam accepts 'PL' mounted lenses (in this case Zeiss primes). Of course sound level is also extremely important. And the Moviecam is always so incredibly quiet which makes such a difference to the whole process of shooting."

It takes more than a reliable and quiet camera to satisfy Alexander Gruszynski. Backup and support are just as vital. For Gruszynski, Moviecam Super Rental has always come through. That's why he's called them before. And that's why he'll call them again.

MOVIECAM SUPER RENTAL

1150 South Robertson Blvd. □ (213) 278-4956
Los Angeles, CA 90035 □ FAX: (213) 278-4958

Backed by the resources of Cinema Products



540 W 36th Street
New York, NY 10018
(212) 594-8700
Telex 265899

Panavision®
Cameras and Lenses

Chapman
Dollies and Cranes

Complete Production Services

Cameras
Lenses
Lighting
Grip Equipment
Sound
Dollies and Cranes
Location Vehicles
Generators

Video
TV Studios

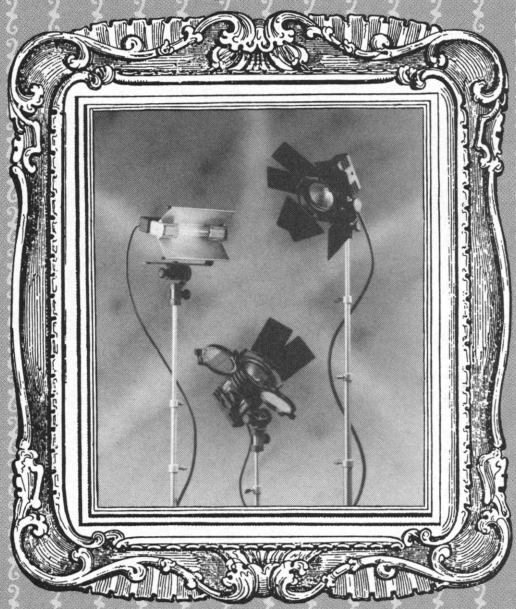
Secrets of the ViPs

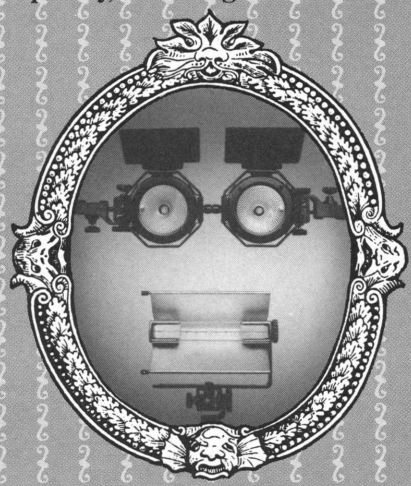
They Face Reality

ViP high-output, low-wattage lights exploit today's fast films, lenses, video cameras, and multiple power sources. They make high-quality, low-budget shoots a reality.

They Inspire Talent

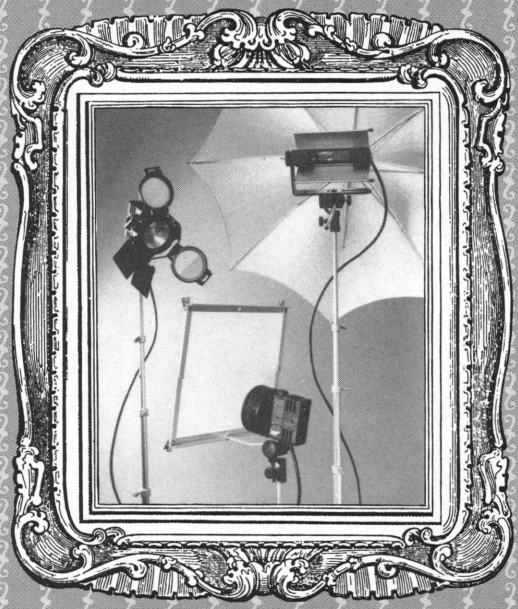
Our little V, i, and Pro-lights each have special talents. Broad, even illumination; flattering fill that can make available light viable; dramatic spot/flood lighting.





They Act Friendly

ViP lights are such good friends, they share their light controls, mounts, and brilliant lighting plans. This distinguished little trio is also uncommonly user-friendly.



lowel®



They Make Connections

Because ViPs are well-connected, they switch from stands, to clamps, to cameras, to ceiling grids, to doors and walls. At your fingertips.



They Get Around

Lowel's little ViP Sophisti-kit is one of seven clever ways to travel with the best—prepared for the worst.

Lowel ViP System—the secrets of success, brought to light.

Lowel-Light Manufacturing, Inc., 475 Tenth Avenue, New York, NY 10018-1197. 212-947-0950.

The International Journal of Film and Video Production Techniques

February 1988 Vol. 69 No. 2

American Cinematographer

Features



28 *Wild Horses, Wild Times*
Prairie roundup redolent of other times

34 *White Zombie* – Today's Unlikely Classic
Povery Row labors, begats a monument

44 Once Upon a Texas Train
Television keeping the Old West alive

54 Outer Space Visited by *Earth Star Voyager*
Disney's first sci-fi mini-series is born

60 Wacky style for *Throw Momma From the Train*
Camera becomes part of physical comedy

67 *School Daze* – Black College Is Background
Film done in style of M-G-M musical

73 Bikes! Camera! Action!
World's narrowest, non-polluting dolly

77 Cancelled *Max Headroom* Leaves Legacy
30 frames per second, film tape freely intercut

83 Stock Footage: a Vital Link
Major part of film industry for 70 years



Departments

10 Letters

12 The Bookshelf

16 What's New

50 Reflections 1: Cronenweth

89 VideoGram

90 Classified Ads

94 Ad Index

95 ASC Awards Set for March 6

96 The Last Page



On Our Cover:
Stagecoach from *Once Upon a Texas Train* rushes towards camera. (Photo by Ron Nance).

Contributing Authors:
Nora Lee
Benjamin Bergeray
Marc Schiller
Linda Lynton
John Howe
Bob Fisher
Ron Magid
Anthony Slide
Bob Birchard

Dave Knox

CINEMATOGRAPHY
STEADICAM
212 • 288 • 1603

NOW!...

available for RENTAL

from CP NEW YORK

PHOTO-SONICS 35/4E
HIGH SPEED CAMERA
...WITH PROVEN RELIABILITY

Photo-Sonics ...when there's no second chance!



☐ Full 360 fps ☐ Full Reflex Viewing
☐ 12-pin pulldown/4-pin registration
☐ Strobe sync, Video Assist & more

— Also Available —
Photo-Sonics 35/4B Rotary Prism Camera to 2500 fps
Photo-Sonics 16mm/500 fps Action Master Cameras

Roessel Cine Photo Tech, inc.
48-20 70th St., Woodside, New York 11377 ☐ 718/424-1600
Telex: 6503234352 MCI

American Cinematographer

George Turner
Editor

Martha Winterhalter
Art Director

Jean Turner
Assignments Editor

Patricia Armacost
Circulation Director

Barbara Prevedel
Accounting

Angie Gollmann
Advertising Sales Director

Margaret Gentleman
Classified Advertising

George L. George
Book Reviews Editor

Publications Advisory Committee

Victor Kemper, *Chairman*
Lester Shorr, *Co-Chairman*
Linwood Dunn
Don Birnkrant
Milton Krasner
Philip Lathrop

American **Cinematographer** (ISSN 0002-7928) established 1920 in 67th year of publication is published monthly in Hollywood by ASC Holding Corp., 1782 N. Orange Dr., Hollywood, California 90028, (213) 876-5080, U.S.A. Subscriptions: U.S. $22.00; Canada/Mexico $27.00; all other foreign countries $32.00 a year (remit international Money Order or other exchange payable in U.S.). Advertising: rate card on request to Hollywood Office. Copyright 1986 ASC Holding Corp. Second-class postage paid at Los Angeles, California and at additional mailing offices. **Postmaster:** send address change to ASC Holding Corp., P.O. Box 2230, Hollywood, CA 90078.

HMI's from LTM

A Daylight-Fill Experience.

THERE'S REALLY NOTHING QUITE LIKE THEM.

LTM's attention to the smallest of details guarantees performance you can depend on, shoot after shoot. And no matter what you're shooting, only LTM's exceptional selection of HMI's, from Fresnels and Cinepars to Softarcs and Fiberoptic Multistrands gives you the flexibility to choose just the right lights for every set-up.

With a coast to coast network of Sales and Rental Service Centers throughout the U.S. and Canada, product availability and expert technical assistance are just a phone call away.

We love our lights! So will you . . .



LTM

CALIFORNIA • NEW YORK • FLORIDA • MICHIGAN
ONTARIO

LTM CORPORATION OF AMERICA
1160 N. Las Palmas Ave., Hollywood, CA 90038 • (213) 460-6166
Telex 677693 FAX (213) 460-6175
LTM CORP. OF AMERICA (FL), 909 N.W. 10th Terrace,
Ft. Lauderdale, FL 33311 • (305) 522-1070
LTM CORP. OF AMERICA (FL), 1509 Pine Ave., Orlando, FL 32824 •
(305) 859-0409
LTM CORP. OF AMERICA (NY), 437 West 16th St.,
New York, NY 10011 • (212) 243-9288
LTM CORP. OF AMERICA (MI), 36875 Schoolcraft Road,
Livonia, MI 48150 • (313) 464-1103

LTM CORPORATION OF CANADA
1665 Enterprise Road, Mississauga, Ontario L4W 4L4 •
(416) 672-5464 FAX (416) 672-2688

A subsidiary of LTM France
Other Offices in London, Paris, Nice and Cologne

SUPER-SCREEN (THE BREECH-LOADER)

FASTEST LOADING/UNLOADING WINDSCREEN SYSTEM MADE IN THE WORLD



Super Quiet
Super Light
Super Strong

SUPER-SCREEN FEATURES:

- PURE POLAR PATTERN
- ENHANCED MID-RANGE (DIALOGUE)
- NO db LOSS IN MID-RANGE
- REDUCED SIBILANCE/RUMBLE
- HIGH WIND NOISE ATTENUATION 25+ db WITH SCREEN ALONE
- SUPER SLIMLINE PROFILE
- 4 PIN, 4 POS. BAYONET LOCK
- EXTREMELY LOW SOUND BOUNCE
- CONTOURED HI WIND COVER
- UNAFFECTED BY RAIN AND SNOW
- CABLE EXIT AT SHOCKMOUNT

SUPER-MOUNT FEATURES:

- QUIETEST & ORIGINAL ISOLATOR DESIGN
- UPPER AND LOWER TWIN VEE WAY JAWS SLIP INTO WINDSCREEN BREECH & LOCK
- VARIABLE SOFT TO HARD SUSPENSION
- MODULAR DESIGN — INTERCHANGEABLE ISOLATOR CRADLES
- USE PISTOL GRIP OR FISHPOLE YOKE

LIGHT WAVE SYSTEMS

7760 BURNET AVE., VAN NUYS, CA 91405 U.S.A.
PH. 818/780-3002 TELEX 690092 LIGHT WAVE UD
Dealer Inquiries Welcome

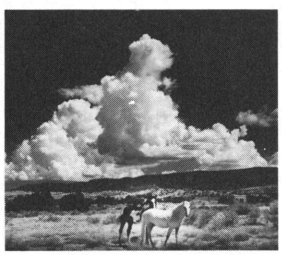
New Mexico.
Behind the scenes.

Take a peek. You'll find The New Mexico Film Commission hard at work — coordinating any shoot in the state.

We deliver New Mexico from the first take to the final wrap: Experienced film and video personnel plus an excellent talent pool. Expert assistance and logistical support, statewide.

An unmatched spirit of cooperation. Breathtaking locations.

Call The New Mexico Film Commission at 1-800-545-9871, toll free. We work behind the scenes, so you don't have to.



NEW MEXICO
FILM COMMISSION

American Society of Cinematographers

The American Society of Cinematographers is not a labor union or a guild, but is an educational, cultural and professional organization. Membership is by invitation to those who are actively engaged as Directors of Photography and have demonstrated outstanding ability. Not all cinematographers can place the initials ASC after their names. ASC membership has become one of the highest honors that can be bestowed upon a professional cinematographer, a mark of prestige and distinction.

Officers

Harry Wolf
President
Leonard South
1st Vice President
Charles Wheeler
2nd Vice President
Victor Kemper
3rd Vice President
Joseph Westheimer
Treasurer
Alfred Keller
Secretary
Jack Cooperman
Sergeant-At-Arms

Members of the Board

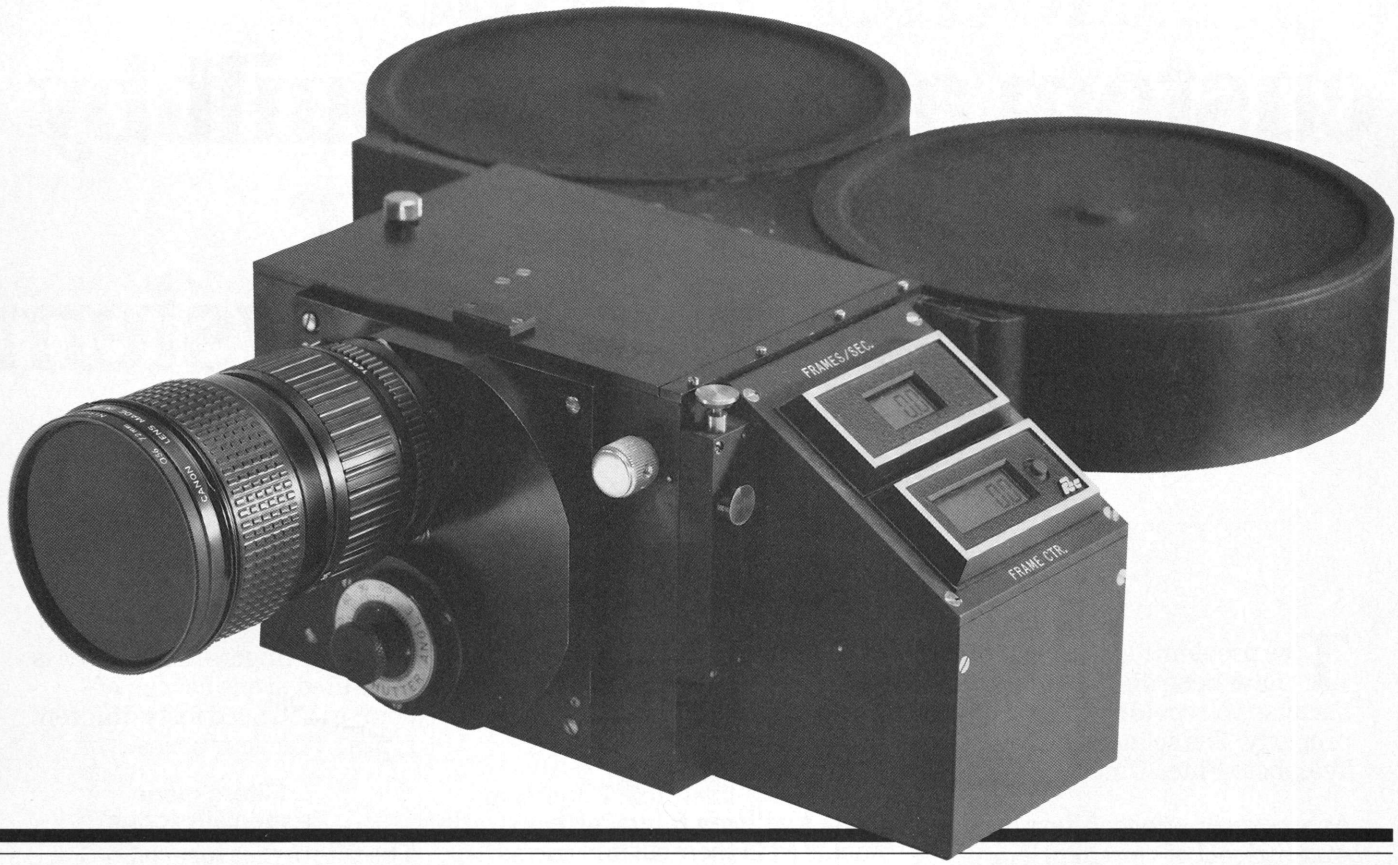
Howard Anderson, Jr.
Joseph Biroc
Jack Cooperman
Stanley Cortez
Linwood Dunn
William Fraker
Milton Krasner
Philip Lathrop
Michael Margulies
Lester Shorr
Leonard South
Ted Voigtlander
Joseph Westheimer
Charles Wheeler
Harry Wolf

Alternates

Richard Glouner
Alfred Keller
Richard Kelley
Victor Kemper
Richard Rawlings

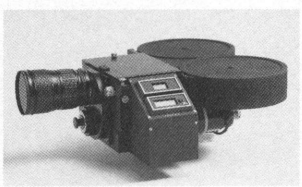
Museum Curator

Kemp Niver



Vista-Fx-207

VISTA-VISION FORMAT • LIGHT-WEIGHT CAMERA



- Vista-Vision format 8-perf pulldown
- Light weight (12 pounds)
- High speed
- Dual pin register
- Variable shutter
- Multi-pass capabilities
- Frame counter
- Tachometer
- Wild motor/stepper motor hook-up
- Canon or Nikon mounts
- Reliability/30 years of production

FLIGHT RESEARCH, in cooperation with GENE YOUNG/EFFECTS, is offering the Vista-Fx-207 camera. For additional information, please send self-addressed stamped envelope to:

Gene Young/Effects
517 West Windsor, Glendale, CA 91204
or call (818) 243-8593

Another unique custom accessory built by Clairmont: our new telephoto filter system

Now you can make your
long-lens shots stunning, even exotic,
with polarizers and grads

The problem: long-lens shots have been difficult to *control*, because you couldn't filter them properly. The solution: our new Telephoto Filter Unit.

As you know, effects filters don't work in front of very long lenses. And even *solid* filters, in front, degrade the image. So people use up to three 40.5mm round filters screwed inside the backs of the long Canons and Nikons.

Screwing around

That means disconnecting the lens from the camera, reaching inside, screwing and unscrewing. A slow business, especially when the sun's going down. Rear screw-ins also mean you can't use polarizers and grads. Well, now you can.

360° rotation, easy image control

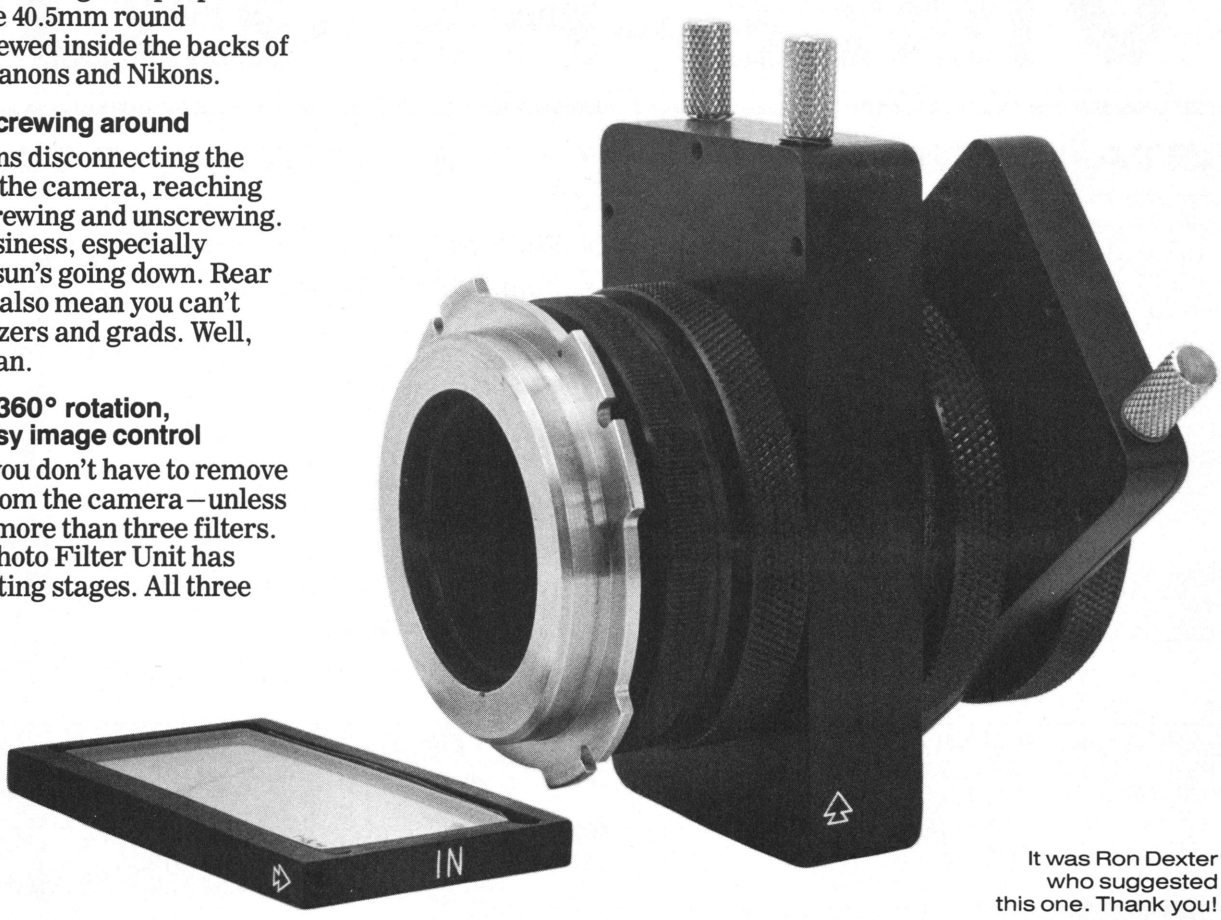
And now you don't have to remove the lens from the camera—unless you want more than three filters. The Telephoto Filter Unit has three rotating stages. All three rotate to any angle you want. Two together, the third independently.

Slide-in trays: no fingerprints

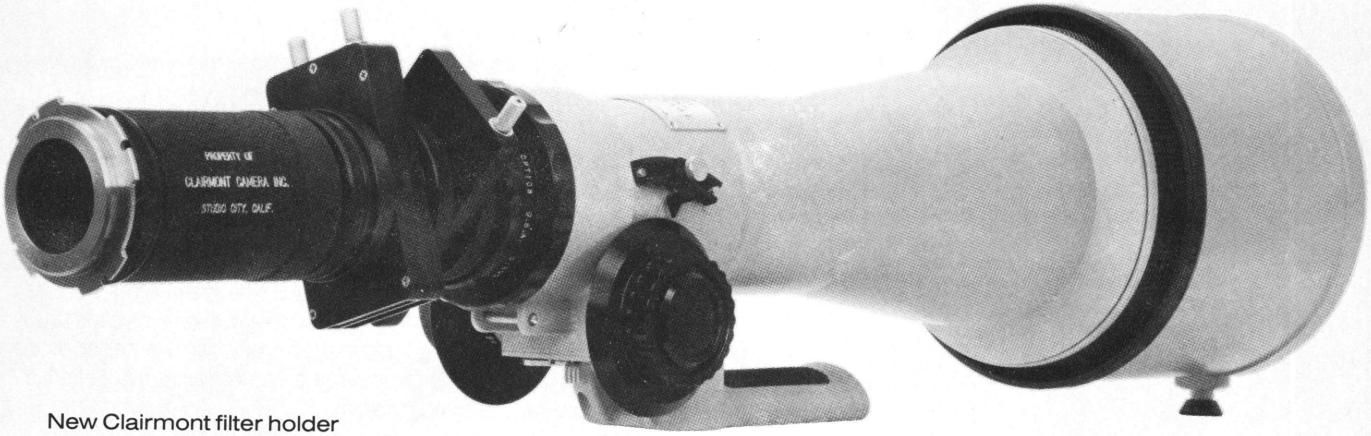
Each foam-lined Tele Filter Box comes with ten filters, already mounted in their custom trays. You don't have to touch the glass with your fingers. Each filter is identified in one corner, of course. You need forty different types? Take four boxes.

Filters made especially for us

The filters measure 2½ × 1¼ inches. They're custom-made for



It was Ron Dexter
who suggested
this one. Thank you!



New Clairmont filter holder mounted at the back of 800mm lens, in front of two-times extender.

us by Harrison, Tiffen and the other principal manufacturers. All the types you'd expect to find.

Special long-lens harder-edge grads, newly designed

Long-lens optics call for a harder-edged grad than you'd use with shorter focal lengths. As you can see in the photo at right, we've had them designed and manufactured, especially for our long-lens system. (In the photo, they look more abrupt than they really are.)

Fine-tune knobs, for accuracy visible in the viewfinder

The trays slide right into the Filter Unit. (Arrows mark the right direction.) And, as you can see, there's a white-metal knob on each filter stage. Turning the knob lets you slowly move an effect filter across the frame and position it exactly.

Which lenses?

The Unit works with Nikon 400mm and 600mm lenses; and it works with Canon 500mm, 600mm and 800mm lenses. With the excellent extender made by Century Precision, the longest Canon becomes a 1600mm.

Six filters with the 1600mm Canon

Of course, you can still use up to three of our round screw-ins, *in addition* to the rotating three. For your next commercial, how about a combination like this: a light Fog, an Enhancer, a Net, an 85 Pola and two color Grads?



Filters custom made for Clairmont in this format.

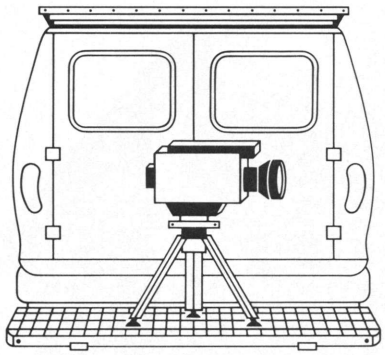
CLAIRMONT CAMERA

4040 Vineland, Studio City, California 91604 • (818) 761-4440
238 East 1st St, N. Vancouver, B.C. V7L 1B3 • (604) 984-4563

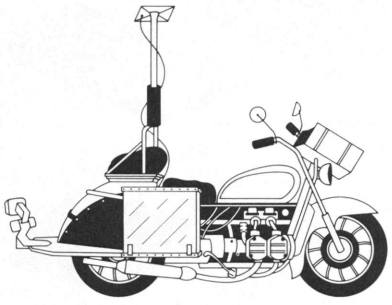
MOTION PICTURE
AND VIDEO
SPECIALISTS



COLT
HELICOPTER LTD.



FLYING TIGER
COMMUNICATIONS INC.



LOCATIONS • AERIALS
• WESCAM
GYRO–STABILIZED
VEHICLE MOUNT
• CONTINENTAL
HELICOPTER MOUNTS

155 WEST 18th ST.
NEW YORK, NY 10011
212-929-1156

Letters

About 'Letterbox'

I would like to respond to Mr. Greg Jennings' Nov. 1987 letter which criticizes Warner Bros.' letterbox video release of Steven Spielberg's *The Color Purple.*

Since I, too, am in favor of presenting genuine wide screen films on TV in some kind of letterbox format, I also had examined *The Color Purple* videocassette with a great deal of interest. A comparison of this release and the letterbox videocassette of Woody Allen's *Manhattan* will indeed reveal a distinct difference between the two films' mode of presentation on TV. But, the problem is not that Warner Bros. is guilty of a "falsehood" (in Mr. Jennings' words) by passing off a bogus letterbox version of the film. Rather, it is a failure in communication whereby our terminology is lagging behind newer formats which are becoming more acceptable to an audience of growing awareness.

I believe consultation with the distributors of *The Color Purple* videocassette will verify that, in fact, it employs a *modified* letterbox image which is intermediate between full-fledged letterbox and the more conventional pan and scan technique. Because this intermediate format has several valuable attributes – even though it lacks a name – it is potentially of great importance for the film and video industries. I feel it should be more closely examined.

There is a growing consensus that pan and scan prints are an unsatisfactory mode of presenting widescreen movies on TV. The viewer-impact of films shown this way is substantially altered not only because of the claustrophobic effect resulting from cropping out at least half of the original image, but also from the fact that the act of planning and scanning in effect re-photographs and re-edits such films so that the TV versions bear little resemblance to the theatrical releases.

One solution used in Europe, and on occasion in America, is to circumvent the excessive cropping of the pan and scan approach by presenting the original wide image on the TV screen (allowing for a certain percentage of cropping from over-scanning). Since the aspect ratio of the anamorphic system is 2.35:1, and that of the TV screen is 1.33:1, fitting the full width of a CinemaScope-type image into a TV screen necessarily means that its *height* must be reduced to nearly half the height of the screen. Hence, its name, the "letterbox" format.

Many purists are adamant in their preference for the letterbox format over pan and scan TV prints. Certainly its ability to maintain the integrity of a film's original wide-screen cinematography is an important quality. But, the letterbox format has numerous shortcomings which counter much of its advantages. With the masked areas occupying nearly half of the video screen above and below the image, it inherently contains an inordinate amount of waste and inefficiency. Being composed of fewer scan lines, image sharpness is sacrificed. The relatively large blank spaces can be visually distracting. And by occupying little more than half the height of the screen, the letterbox image can seem diminishing on all but the largest TV screens.

A simple solution to the disadvantages of both the pan and scan and letterbox formats is to obtain an image halfway between them – a *modified* letterbox format, so to speak. This, I believe, is essentially what was done with *The Color Purple* videocassette. This intermediate image is achieved by either pulling away from the pan and scan image, or zooming in on the letterbox image, so that the amount of cropping of the original widescreen image is equal to the amount of masking of the TV screen. While still a compromise, the modified letterbox approach reduces the shortcomings while retaining the advantages of the two extreme formats. It encompasses most of the original wide screen image, minimizing the need for panning and scanning, while still occupying most of the TV screen space – the masked areas are significantly reduced in size.

The ultimate solution, of course, is to introduce wide screen television, but until that advent, the modified letterbox format is the best possible compromise for everyone concerned: filmmakers, video distributors, and the home viewer.

– Richard A. Strain
Tampa, Florida

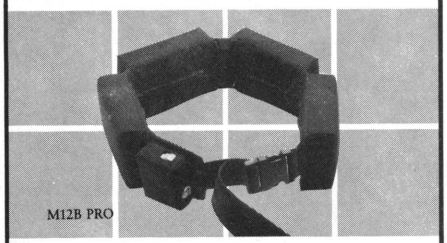
THROW MOMMA FROM THE TRAIN

We are proud
to have shared in
the laboratory services
to make this feature possible



Film Laboratory • Titles & Opticals • Videotape Services • Sound Stage • Production Facilities
959 Seward St., Hollywood, CA 90038 • (213) 960-7444
Telex: 06-74257 • Telecopier: 213•460•4885 • Cable: CONSOLFILM

AFFORDABLE PORTABLE POWER.



- **M12B Pro** 12 volts, 12 amps. 4-pin canon connector. Built in volt meter. Self-resetting circuit breaker. **$299.95**



- **M6E Pro** 12 volts, 6.5 amps. 4-pin canon connector. Built in volt meter. Self-resetting circuit breaker. Belt/shoulder strap. **$164.95**
- **Maximizer Pro** 13.2 volts, 4.8 amps. 4-pin canon connector. Short circuit protection. Belt/shoulder strap. **$209.95**
- **Also available:**
  M20B Pro (12 volts, 20 amps) $349.95,
  6E Pro (12 volts, 6.5 amps, no meter) $134.95,
  M630B Pro (30 volts, 6 amps) $349.95,
  M1030B Pro (30 volts, 10 amps) $399.95.

All packs include overnight charger. Fast chargers also available. Fits waists, 30″–52″.



RL100/150 Pro AC/DC Video Light The lightest AC/DC video light ever–10 oz. On/off switch. Shoe mount adaptor. Comes with 4-pin canon adaptor, 100w DC & 150w AC bulb, 4 ft. cord. Runs so cool, you can touch it. **$174.95**

Redline's battery belts and packs are made of padded Cordura® nylon. Our intelligently designed, quality constructed products are guaranteed for one year.

The Leading Source in Portable Power.

RED LINE®

4055 Guasti Road, Suite 110
Ontario, CA 91761
(714) 986-6600

© 1987 Red Line Research Laboratories, Inc.

The Bookshelf

by George L. George

The contribution of master cameramen to the art and techniques of cinema is delineated in **Five American Cinematographers** by Scott Eyman. In substantive interviews, Karl Struss, ASC, Joseph Ruttenberg, ASC, James Wong Howe, ASC, Linwood Dunn, ASC, and William H. Clothier, ASC, offer knowledgeable comments on the development of camera techniques and production procedures, and personal memories of working with George Cukor, Charles Chaplin, Sam Peckinpah, William Wellman, John Ford, Orson Welles and others. *(Scarecrow, Metuchen, NJ, $25).*

A yearly supplement to the 12-vol. Motion Picture Guide, the 1987 edition of **The Motion Picture Guide Annual** covers all features released in the US during the previous year. Expertly edited by Jay Robert Nash and Stanley Ralph Ross, each entry of this valuable research source includes lengthy plot summaries with critical evaluations, full production data, and other essential information. *(CineBooks, Evanston, IL; Bowker, distrib., NYC, $99.95).*

Denis Gifford's sweeping survey, **British Animated Films, 1895-1985** logs close to 1300 entries, from one-minute wartime propaganda cartoons to full-length features. Complete production data, plot summaries and review excerpts complete this specialized reference work. *(McFarland, Jefferson, NC, $29.95).*

A study impressive in scholarship and magnitude, Richard Abel's **French Cinema** is fundamental to our understanding of film as a societal phenomenon. It considers the 1915-1929 period, when the dynamic style of American imports confronted the traditional French literary approach, an artistic clash that prodded domestic filmmaking into more relevant patterns, and gave birth to an active avant-garde. *(Princeton U. Press, Princeton, NJ, $27.50).*

A comprehensive survey by Richard C. and Marie E. Helt, **West German Cinema Since 1945** carries full data on over 3300 features, with cross-indexing of directors and performers, biographies of leading directors, and English-language titles of all listed films. This extensive refernece work also includes a brief history of the German film industry and interviews with filmmakers. *(Scarecrow, Metuchen, NJ, $52.50).*

Anthony Slide's **The Big V** tells the story of Vitagraph, a major Eastern film production company from the 1890s to its 1925 sale to Warner Bros. This richly documented volume contains biographical sketches of Vitagraph's leading actors, directors, cameramen and producers, a complete list of its films, and an account of its business dealings. *(Scarecrow, Metuchen, NJ, $29.50).*

A star of the movies' early days is portrayed by Q. David Bowers in **Muriel Ostriche, Princess of Silent Films.** This informative, well illustrated book traces Ostriche's 1912-1920 career against a detailed background of East Coast film production. *(Vestal Press, Vestal, NY, $24.95/14.95).*

In her delightfully informal memoir, **The Making of "The African Queen,"** Katharine Hepburn narrates her experiences during the 1951 shooting in the former Belgian Congo of John Huston's classic movie. Hepburn's incisive sketches of Huston, co-star Humphrey Bogart with wife Lauren Bacall along for the ride, and producer Sam Spiegel, all struggling valiantly to surmount the rigors of climate, the primitive accommodations, not to mention the hazards of production in an inhospitable jungle. *(Knopf, NYC, $15.95).*

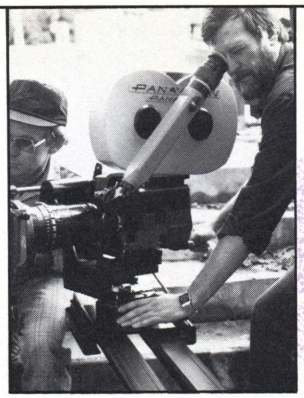
An intriguing literary tour of L.A. is conducted by Elizabeth Ward and Alain Silver in **Raymond Chandler's Los Angeles.** It juxtaposes passages from Chandler's suspenseful novels and realistic screenplays with striking photographs of the city, evoking dramatically the environment of private eye Phillip Marlowe's relentless stalking of his prey. *(Overlook, NYC, $25).*



Virginia Ought To Be Shot.

For mountains majestic and beaches beautiful, for settings quaint and colonial or cities modern, Virginia has already been shot by many. Find out who done it in Virginia and how. Write to **Virginia Film Office** Andy Spaulding, Director, Virginia Film Office, Department of Economic Development, Richmond, Virginia 23219, or call (804) 786-3791. You probably ought to shoot Virginia yourself.

Cam-Rail. The Smoothest Distance Between 2 Points.



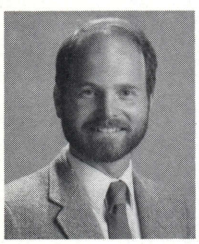
Bridge the gap with the light-weight portable tracking system from Sweden. Versatile, and easy to set up. The camera carriage moves manually or with the silent electric drive unit. Cam-Rail forms a secure monorail support to let you smoothly glide your camera over any terrain.



DISTRIBUTED BY:

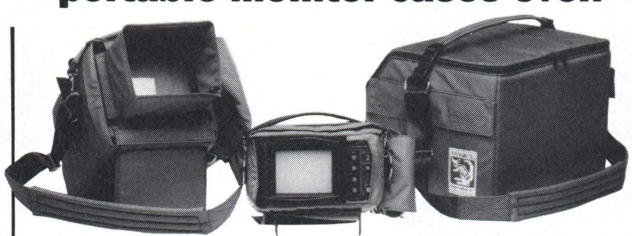
band
PRO FILM VIDEO INC.

425 N. Moss Street, Burbank, CA 91502 Tel: (818) 841-9655 Fax: (818) 841-7649



Steve Leiserson,
President
Kangaroo Video Products, Inc.

". . . the most field-practical portable monitor cases ever."



In 1980, a TV news cameraman created the first video bag to bring not only the best protection to sensitive video equipment, but organization. With original designs such as cable organizers, strain-relief loops and additional pockets.

Since that time, he's designed countless bags, cases and accessories. As president of Kangaroo Video Products, Steve Leiserson is dedicated to answering the needs of the industry with intelligent designs.

- Lightweight and abrasion-resistant Cordura® shell.
- Four-sided visor shields screen under bright light.
- Reversible pedestal allows viewing at different angles. Velcro adjustment for fine tuning of angle.
- Pedestal folds up and stows in hidden sleeve.
- Strategic flaps provide ventilation and complete access to controls and plugs.
- Pocket for batteries and cables.
- Removable padded shoulder strap and padded handle.
- Available in 7 colors: Blue, Gray, Black, Brown, Burgundy, Green and Orange.
- Both field-use cases and carrying cases available for: Sony PVM 8020 Monitor, BVM 8021 Monitor, EVM 8010 8mm Player/Monitor, Panasonic AG-500 VHS Player/Monitor, JVC TM-22U Monitor and many others.

"All of my products are padded with high-density Evazote® foam, a superior insulation against concussion. And that's where the competition doesn't compete. Ask questions. If it's not high-density Evazote, you'll end up with padding that's as protective and pliable as stale bread. If ever you're not satisfied with any Kangaroo product, call me."

Steve Leiserson

KANGAROO VIDEO PRODUCTS, INC.
10845 Wheatlands Avenue, Suite C Santee, CA 92071-2856
(619) 562-9696 / TLX 371 8593 KVPUSA
© 1987, Kangaroo Video Products, Inc.
Pictured: field-use case for Sony PVM-8020, JVC TM-22U and carrying case for Panasonic AG-500.

In **Hollywood Anecdotes,** Paul F. Boller Jr. and Ronald L. Davis assemble a collection of choice yarns, ranging from often quoted Goldwynisms to startling instances of Stroheim's flagrant disregard for costs. In the same vein, Otto Friedrich's **City of Nets,** now in paperback, brings literary polish and social insight to delectable tales involving Hollywood biggies. *(Morrow, NYC, $18.95; Harper & Row, NYC, $10.95).*

Recently published memoirs by and about screen favorites include Alexander Walker's **Vivien: The Life of Vivien Leigh,** a haunting portrait of a woman whose beauty and talent were eventually destroyed by her private demons. *(Weidenfeld & Nicolson, NYC, $18.95).* Warren G. Harris, in **Cary Grant: A Touch of Elegance,** focuses on Grant's love affairs and marriage problems. *(Doubleday, NYC, $17.95).* Pilar Wayne reveals in **John Wayne: My Life with the Duke** the complex personality of her husband of 25 years. *(McGraw-Hill, NYC, $17.95).*

Myrna Loy's autobiography, **Being and Becoming,** tells of a remarkable woman who perceived her private life as a subtle reflection of her screen image. Written with James Kotsilibas-Davis, the book fondly recalls her many starring roles and her staunch defense of Hollywood's liberal tradition. *(Knopf, NYC, $22.95).*

Mamie Van Doren must be the foremost exponent of *glasnost* in this country, judging by the frankness of her entertaining memoir, **Playing the Field.** Its candid recital of her amorous dalliances will probably gratify the reader much more than the record of her modest screen career. *(Putnam, NYC, $18.95).*



Goodbye Video Assist Flicker.

Eliminate flicker from any *video assist system with Cinema Electronics' new Video Flicker Processor. Weighing in at less than 3 lbs., this compact unit will change the face of your video assist.*

Why settle for 80% of the picture?

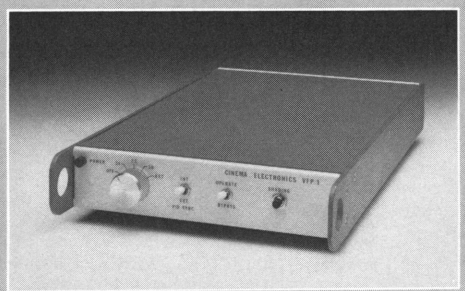
That's what you get from conventional video assist. But the Video Flicker Processor™ utilizes Cinema Electronic's proprietary ultra-high resolution dual frame store system to provide 100% of the image. So clients and crew actually view what the film camera sees. Nuances of lighting and mood. Subtleties of expression. Definition of space. All free of annoying flicker.

Keep the Video Assist Camera You Already Own.

Cinema Electronics Video Flicker Processor provides perfect flicker-free images with your Philips, Panavid®, SuperPanavid®, CEI, Aaton, and Insight cameras. Video output from the unit is *standard* NTSC or PAL so the system *fully integrates with all your existing video equipment.*

Easy Set-up and Operation.

For *stand alone operation* at 24, 25, or 30 fps, the Video Flicker Processor simply connects to the video assist camera. The speed selection control is set to match the film camera's crystal controlled speed. That's it. Absolutely no connection to the film camera is necessary. And *variable speed* operation is also easily achieved.



The compact (8″ × 12″ × 2″) Video Flicker Processor™ is packaged in a rugged aluminum housing and runs for 24 hours on a standard 12V camera battery!



Cinema Electronics also manufactures the Shot Box™ video frame store unit. This tiny package lets you add sophisticated effects to your video assist, including: frame store, split screen, superimpose, wipe, compare live video and more.

Call Cinema Electronics Toll Free.

Cinema Electronics is pleased to provide sales and technical support. Call us at:

1-800-MR. VIDEO
(1-800-678-4336)

Ask about the Cinema Electronics line of video assist products.

Cinema Electronics

Hermosa Beach, California
(213) 376-0403 FAX (213) 372-6765
Telex 650 310 7421

Available from:

LOS ANGELES	NEW YORK	LONDON	PARIS
Clairmont Camera (818) 761-4440	Camera Service Center (212) 757-0906	Video & Film Co. 01-267-5111	Samuelson ALGA Cinema 1-43-28-58-30

VANCOUVER	DALLAS	CHICAGO	ATLANTA	DETROIT
Clairmont Camera (604) 984-4563	Victor Duncan, Inc. (214) 869-0200	Victor Duncan, Inc. (312) 943-7300	Victor Duncan, Inc. (404) 355-3001	Victor Duncan, Inc. (313) 471-1600

And Panavision agents worldwide.

Panavid and SuperPanavid are registered trademarks of Panavision, Inc.

Cameraman's Calculator Re-Issued

Skeets Kelly, a well known second unit British cameraman, was a prisoner of war in Germany for the last two years of World War II after his plane was forced down while on a bombing mission. During that time he had a lot of time to think—about wife and home and, as he said, his only other love, film.

He conceived the idea for a calculator for cameramen and assistants that didn't need the constant thumbing through of pages. He was no mathematician, but when he was released from prison he found someone who was: Bill Pollard, another cameraman. Between them, they worked the idea out in disc form. It contained everything then required—depth of focus tables, exposure compensation, fields of view, filter factors, Technicolor, f-stops, and more.

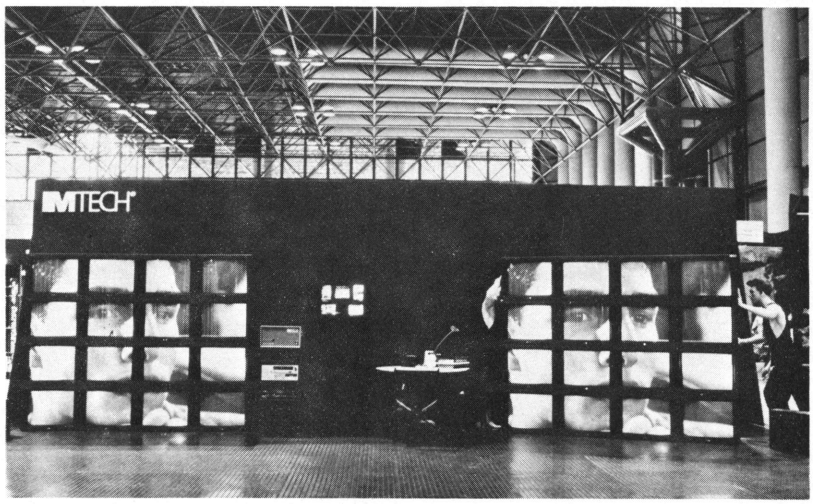
Skeets then presented the idea to the newly formed British cameraman's union because at that time (the late forties) it would have cost more to manufacture than he was able to raise. The section promised to back him by agreeing to have a collection amongst the members if Kelly lost money. Everything went well until the time of Skeets' death in 1969, after which the calculator was sort of shelved.

In 1979 working with me on *Moonraker* was special effects man, Andrew Kelly, son of Skeets. He told me the rights to the calculator had reverted to Skeets' widow, Toni. By coincidence the Guild of British Camera Technicians (G.B.C.T.) had just been formed and was looking for ventures. The board decided to update the calculator and hired Dr. Stephen Jackson to investigate new information needed. We found a company to produce it, and Kodak Ltd. agreed to subsidize it.

Information in one pocket sized disc includes depth of focus spherical and anamorphic, fields of view for various screen ratios, exposure compensation, as well as the original calculations. It is available in imperial and metric versions for 35 and 16mm film.

For more information, Birns & Sawyer Inc., 1026 N. Highland Ave., Hollywood, CA 90038.

—Paul Wilson, BSC



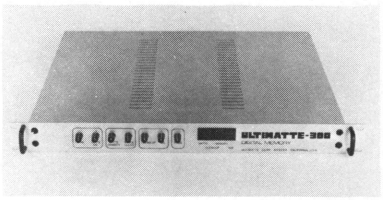
Video Walls

New York-based Imtech International is steadily advancing the art of the video wall by moving it from the confines of trade shows to the broader realm of retail environments, discoteques and television commercials. At the heart of the company's success is its ability to create a video wall that will reliably stand the test of time.

By combining the Imtech digital processor, which can run either 16 or 32 monitors, with Sony PVM-2530 25-inch cubic monitors and source material, Noble has been able to provide video walls at typically one third of the cost of other video wall packagers. About 80% of the source material is played back on a Sony VP-5020 U-matic® player.

In the past year, the four-year-old company has permanently installed 20 video walls and has rented systems to many leading corporations for trade show use. Customers have included: Disney World, Nordstrom, The Limited, The Broadway, Belk, Nike, Boeing and Purolator Products.

For more information: Sony Corp., 9 W. 57th St., New York, NY 10019. (212) 418-9427.



New Model Ultimatte

Ultimatte Corporation, innovator of undetectable video composites, announces a new model Ultimatte.

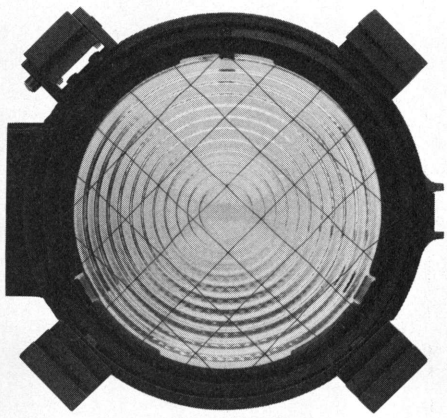
The Ultimatte-300, whose formal introduction will take place at Japan's Interbee '88, is priced between the broadcast-oriented Newsmatte-2 and the production-oriented Ultimatte-4 and Ultimatte-5.

Combining the Emmy-winning Ultimatte image technology with microprocessor-controlled automation and digital memory, the 300 offers a sophisticated image compositing device which fits comfortably into almost any production budget.

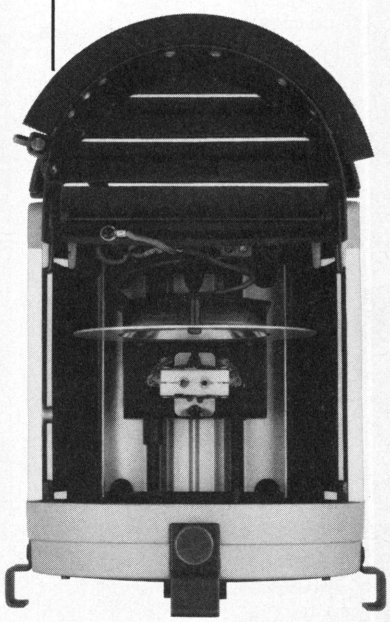
ARRI Redefines Location Lighting

Maximum optical performance. Location-tough rugged construction. New ARRI Fresnels give you both.

More light with wider lenses.
New 650, 1000, and 2000W Fresnels have larger lens diameters but in housings no larger than conventional lights. You get a smoother field with wider spread and *up to one stop more light at full flood!*



A lamp that lasts.
New 300 and 650W Fresnels feature a new lamp with an improved filament that gives you more light and *doubles the life of existing lamps.*

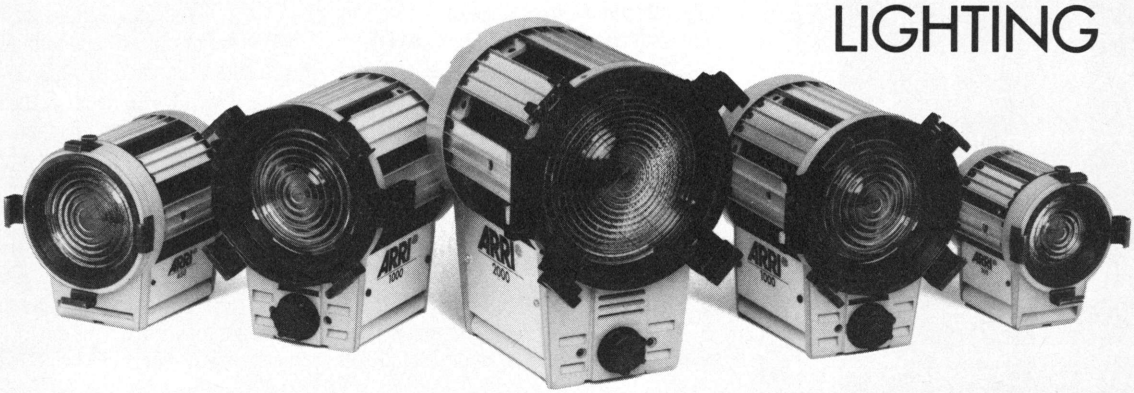




New, more durable construction.
New 300, 650, 1000, 2000 and 5000W Fresnels take advantage of new extruded aluminum technology to create much tougher, more durable housings yet with superior cooling characteristics.

FOR THE FIRST TIME, MAXIMUM OPTICAL PERFORMANCE COMBINED WITH LOCATION-TOUGH RUGGED CONSTRUCTION.

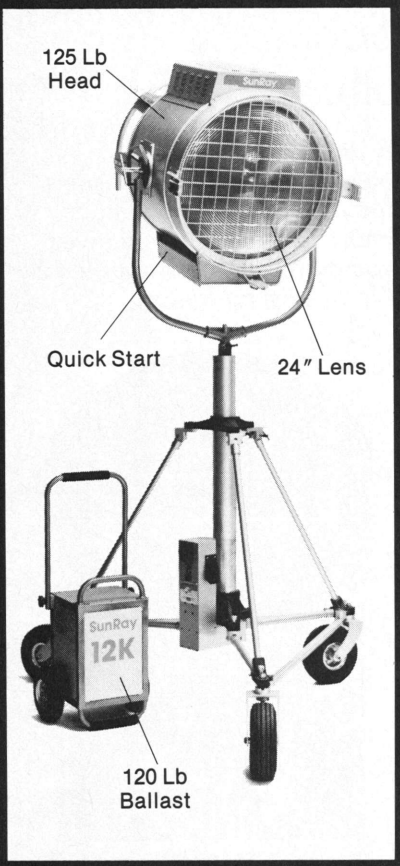
ARRI
LIGHTING



Arriflex Corporation 500 Route 303, Blauvelt, NY 10913 (914) 353-1400 TWX 7105752624 FAX (914) 425-1250
600 No. Victory Blvd., Burbank, CA 91502 (818) 841-7070 TWX 9104984641 FAX (818) 848-4028

© 1987 ARRIFLEX CORPORATION

SunRay
12K HMI
FOR PROFESSIONAL MOTION PICTURE LIGHTING



- Demonstrated at SMPTE, Los Angeles
- Thousands of hours of field operations
- Owned and operated by rental houses, gaffers and production companies
- Competitively priced
- Lease finance programs available
- The Lightest Ballast — 120 Lb
- Featuring "Quick Start"

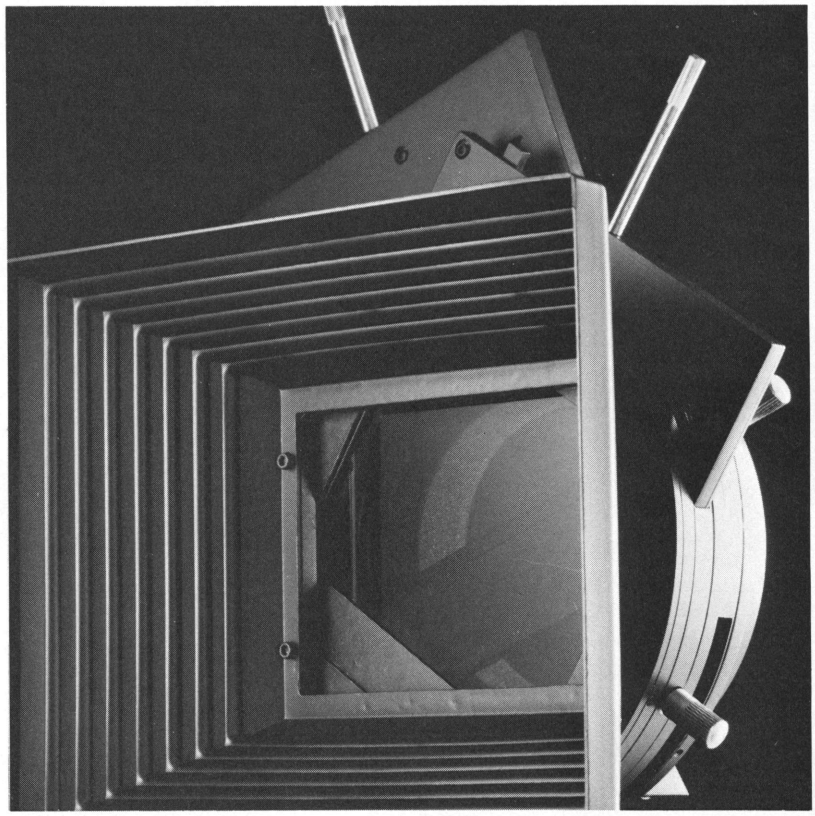
For more information
ask for Alan at (213) 469-2987

ULTRACAM

5609 SUNSET BLVD.
HOLLYWOOD, CA 90028

The new 300 is available now in either NTSC or PAL.

For more information: Ultimatte Corporation, 18607 Topham Street, Reseda, CA USA 91335, Telephone: 818 345-5525. FAX: 818 344-7053.



Production Matte Box

The 4x4 Universal Production Matte Box was introduced by Geocam Corp. at the 1987 SMPTE exhibition.

A single configuration fits most ENG, EFP and 16mm cameras and lenses without special brackets or modifications. Many special purpose cameras and 35mm cameras with prime lenses can also be accommodated. The adjustable undercarriage permits the matte box to shift left to right, shift back to front, and rise and fall for perfect alignment of camera, lens, filters and sunshade. Lenses up to 4⅝″ outside diameter are accepted. This system is ideal for those who want to use one set of filters with several different cameras.

Modular construction permits filter stages to be added or removed in the field as required. Stages are available for 4″ square and 4½″ round filters.

Extensive filter movement permits optimum positioning of graduated and special effects filters. Each square filter stage rotates 360 degrees. Rise and fall, with good baffling, is limited only by the lens field. A convenient single knob on each stage locks all movements. Safety stops prevent unlocked holders from accidentally sliding out of the unit. Filter holders can be inserted upside down or backwards. Round filters can be stacked and rotated in their own mounts.

For more information, contact Geocam Corp., P.O. Box 704, Orange, N.J., 07050. Telephone: (201) 672-2223.

Field Recording Tape

The growing use of Agfa PEM 468 audio mastering tape with Nagra field recorders was noted by Agfa-Gevaert, Inc., at the 1987 SMPTE Show in Los Angeles.

The proven 468 formulation has become the magnetic stock of preference of Hollywood's leading sound recordists for film and television.

PEM 468 boasts the lowest print-through rating of any high output audio mastering tape. Bias and modulation noise are reduced to a minimum. For convenience, every reel of PEM 468 is individually

WINTER 1987\88
EQUIPMENT SALE

LIGHTING ITEMS

ARRILITE 1000W QUARTZ	$ 175.00
ARRILITE 650W QUARTZ	160.00
LTM 1200W HMI SOFT LIGHT W/BALLAST, CABLES, & BARNDOOR	800.00
LTM 4000W HMI LIGHT W/BALLAST, CABLES, & BARNDOOR	2,500.00
KOBOLD 1200W HMI LIGHT W/BALLAST, CABLES, & BARNDOOR	750.00
COLORTRAN MINI PRO	65.00
COLORTRAN 1000W BACK LIGHT	80.00
COLORTRAN 1000W MINI LIGHT	100.00
MOLE RICHARDSON STUDIO 2000W SOFT LIGHT	400.00
MOLE RICHARDSON STUDIO 4000W SOFT LIGHT	550.00
MOLE RICHARDSON STUDIO 8000W SOFT LIGHT	1,200.00
MOLE RICHARDSON 5000W CONELIGHT	200.00
MOLE RICHARDSON 2000W STUDIO SPOT LIGHT W/BARNDOOR	275.00
MOLE RICHARDSON QUAD LIGHT	195.00
MOLE RICHARDSON 5000W SENIOR SOLAR SPOT	550.00
MOLE RICHARDSON 10,000W TENER SPOT	1,050.00
MOLE RICHARDSON 1000W BROAD LIGHT	75.00
MOLE RICHARDSON TEENIE 650 W	160.00

GRIP EQUIPMENT

MOLE RICHARDSON CRANK-UP STAND	$ 225.00
MOLE RICHARDSON MOLE-O-VATOR	4,500.00

35MM CAMERAS

ARRIFLEX 35BL III (BAYONET MT.) WITH 2-400' MAGAZINES, 4×4 MATTE BOX, MULTI PURPOSE BRIDGE PLATE, CABLE AND CASE. RECENT OVERHAUL, ONE YEAR WARRANTY*	$50,000.00
ARRIFLEX 35BL II WITH 2-400' MAGAZINES, 4×4 MATTE BOX, BRIDGE PLATE, PRIME LENS HOUSING, CABLE AND CASE. RECENT OVERHAUL, WITH ONE YEAR WARRANTY*	35,000.00
ARRIFLEX 35BL I WITH 2-400' MAGAZINES, 4×4 MATTE BOX, BRIDGE PLATE, PRIME LENS HOUSING, CABLE AND CASE. RECENT OVERHAUL, ONE YEAR WARRANTY*	20,000.00
ARRIFLEX 35III (BAYONET MT.) WITH 2-400' MAGAZINES, STANDARD DOOR, CABLES AND CASES. RECENT OVERHAUL, ONE YEAR WARRANTY*	24,000.00
ARRIFLEX 35IIC WITH 2-400' MAGAZINES, VARIABLE OR CONSTANT SPEED MOTOR, CABLES AND CASES. RECENT OVERHAUL, ONE YEAR WARRANTY*	5,800.00
ARRIFLEX 35IIC HARD FRONT (BNCR) WITH 2-400' MAGAZINES, VARIABLE OR CONSTANT SPEED MOTOR, CABLES AND CASE. RECENT OVERHAUL, ONE YEAR WARRANTY*	5,800,00
ARRIFLEX 35IIC HARD FRONT (R-35) WITH 2-400' MAGAZINES, VARIABLE OR CONSTANT SPEED MOTOR, CABLES AND CASE. RECENT OVERHAUL, ONE YEAR WARRANTY*	5,800.00
ARRIFLEX 35IIC WITH 2-400' MAGAZINES, VARIABLE OR CONSTANT SPEED MOTOR, OFFSET GEAR BASE, SET OF SCHNEIDER LENSES 28MM, 50MM, 75MM, CABLE AND CASE. RECENT OVERHAUL, ONE YEAR WARRANTY*	7,500.00
ARRIFLEX IIC VIDEO ASSIST	2,500.00

35 BL ACCESSORIES

BL VIDEO ASSIST	$ 6,500.00
BLIMP HOUSING 20-120MM ANGENIEUX	2,000.00
BLIMP HOUSING 20-100MM COOKE	2,000.00
EXTENSION FINDER 9"	1,100.00
EXTENSION FINDER 12"	1,900.00
6×6 MATTE BOX	1,800.00
HIGH SPEED LENS HOUSING	1,000.00
HEATED BARNEY 400'	500.00
HEATED BARNEY 1000'	600.00
400' BL I/II MAGAZINE	3,000.00
1000' BL I/II MAGAZINE	4,000.00
400' BL III MAGAZINE	3,500.00
1000' BL III MAGAZINE	4,500.00

ARRIFLEX ACCESSORIES

ARRIFLEX BALANCING PLATE	$ 500.00
ARRIFLEX IIC FELLINI DOOR	950.00
ARRIFLEX PERISCOPE FINDER	900.00
ARRIFLEX IIC HARD FRONT FOLLOW FOCUS	650.00
ARRIFLEX IIC HARD FRONT BELLOWS MATTE BOX	400.00
ARRIFLEX IIC BELLOWS MATTE BOX	350.00
ARRIFLEX IIC 3"×3" MATTE BOX	75.00
ARRIFLEX IIC HIGH HAT	60.00
MITCHELL BNCR 35MM CAMERA CSC CONVERTED SPINNING MIRROR REFLEX, WITH 4-1000' MAGAZINES, CRYSTAL MOTOR, SUPER BALTAR LENSES, 25MM, 50MM, 75MM, HOUSINGS AND CASES	7,500.00
MITCHELL BNC "LIGHT WEIGHT" 35MM CAMERA CSC CONVERTED SPINNING MIRROR REFLEX, WITH 4-1000' MAGAZINES, CRYSTAL MOTOR, SUPER BALTAR LENSES 25MM, 50MM, 75MM, HOUSINGS AND CASES	15,000.00
MITCHELL R35 W/POSITIVE LOCK MOUNT WITH 2-1000' MAGAZINES, SUPER BALTAR LENSES, 25MM, 50MM, 75MM, SPECIAL MATTE BOX, 110V SYNC OR VARIABLE SPEED MOTORS CABLES AND CASES	15,000.00
VIDEO ASSIST FOR MITCHELL BNCR OR R-35	2,500.00
ECLAIR CAMEFLEX CM3 16/35 (CATAL) WITH: 4-400' 35MM MAGAZINE, 1-400' 16MM MAGAZINE, 2-8 VOLT MOTOR, SET OF KINOPTIC LENSES: 18, 25, 50, 75MM, A 16MM ZOOM LENS 12-120MM C-MT. AND SONY VO2800 VIDEO EDITOR	PACKAGE PRICE: 15,000.00

16MM CAMERAS

ARRIFLEX 16MM SR I WITH 2-400' MAGAZINES, 1-BATTERY ADAPTER, PISTOL GRIP, CABLE AND CASES. RECENT OVERHAUL, ONE YEAR WARRANTY*	20,000.00
ON BOARD BATTERIES AND CHARGERS AVAILABLE AS NEW EQUIPMENT ONLY AT PREVAILING PRICES, INQUIRE	
ARRIFLEX 16SB WITH 2-400' MAGAZINES, CONSTANT OR VARIABLE SPEED MOTOR, ONE TORQUE MOTOR, CABLES AND CASES. RECENT OVERHAUL, WITH ONE YEAR ARRIFLEX CORP. WARRANTY	2,500.00
ECLAIR NPR 16MM WITH 2-400' MAGAZINES, ANGENIEUX VIEWFINDER, PISTOL GRIP, CONSTANT SPEED MOTOR, CABLES AND CASES	3,500.00

SUPER SPEED LENSES

18MM ZEISS T1.4 SUPER SPEED W/ARRI MT	$ 3,000.00
25MM ZEISS T1.4 SUPER SPEED W/ARRI MT	3,000.00
35MM ZEISS T1.4 SUPER SPEED W/ARRI MT	3,600.00
50MM ZEISS T1.4 SUPER SPEED W/ARRI MT	3,200.00
85MM ZEISS T1.4 SUPER SPEED W/ARRI MT	3,300.00

WIDE ANGLE AND PRIME LENSES

5.7MM TEGEA W/ARRI MT	$ 1,000.00
9MM COOKE W/ARRI MT	650.00
14.5MM ANGENIEUX W/ARRI MT	600.00
8MM ZEISS LENS W/ARRI MT	2,200.00
15MM KOWA W/R35 MT	750.00
16MM ZEISS W/ARRI MT	2,400.00
16MM SCHNEIDER W/ARRI MT	375.00
18.5MM ANGENIEUX W/ARRI MT	400.00
20MM SUPER BALTAR W/R35 MT	750.00
24MM ZEISS W/ARRI MT	2,400.00
25MM SUPER BALTAR W/R35 MT	600.00
25MM SCHNEIDER W/ARRI MT	375.00
28MM SCHNEIDER W/ARRI MT	375.00
32MM ZEISS W/ARRI MT	2,000.00
35MM SCHNEIDER W/ARRI MT	375.00
35MM SUPER BALTAR W/R35 MT	550.00
50MM ZEISS W/ARRI MT	1,950.00
50MM SUPER BALTAR W/R35 MT	325.00
50MM SCHNEIDER W/ARRI MT	550.00
75MM SCHNEIDER W/ARRI MT	375.00
75MM SUPER BALTAR W/R35 MT	550.00
85MM ZEISS W/ARRI MT	2,000.00
100MM SUPER BALTAR W/R35 MT	475.00
100MM KINOPTIC W/ARRI MT	175.00
105MM SCHNEIDER BELLOWS W/ARRI MT	125.00
135MM ZEISS LENS W/ARRI MT	2,100.00
135MM ZEISS W/ARRI MT	2,595.00
150MM SUPER BALTAR W/R35 MT	550.00
150MM KILFIT W/ARRI MT	175.00
200MM OMNITAR W/ARRI MT	175.00
203MM COOKE TELEPANCHRO W/ARRI MT	450.00
300MM ASTRO BERLIN W/ARRI MT	175.00
300MM KILFIT W/ARRI MT	400.00
400, 600, 800, 1200MM KILFIT COMBI WITH SUPPORT SYSTEM AND ARRI MT	1,500.00
600MM CENTURY TELEPHOTO W/ARRI MT	550.00

ZOOM LENSES AND CONTROLS

9.5-95MM ANGENIEUX ZOOM W/ARRI MT	$ 1,500.00
12-120MM ANGENIEUX ZOOM W/ARRI MT	1,100.00
20-100MM COOKE ZOOM W/ARRI MT	11,500.00
20-120MM ANGENIEUX ZOOM W/ARRI MT	6,100.00
25-120MM MACRO CANNON ZOOM W/ARRI MT	3,300.00
25-250MM ANGENIEUX ZOOM W/ARRI MT	4,500.00
25-250MM COOKE ZOOM W/ARRI MT	8,250.00
C.P. J4 ZOOM MOTOR W/CONTROL	900.00

ASSORTED SUPPORT BRACKETS AVAILABLE FOR ALL ZOOM LENSES INQUIRE.

MAGAZINES

200' ARRI IIC MAGAZINES	$ 450.00
400' ARRI IIC MAGAZINES	950.00
400' ARRI 16S MAGAZINES	400.00
400' ARRI BL 16 MAGAZINES	500.00
400' ECLAIR MAGAZINES	500.00
400' R-35 MAGAZINES	200.00
1000' MITCHELL 35MM MAGAZINES	225.00
1200' ARRI BL 16MM MAGAZINES	550.00

BARNEY COVERS

MITCHELL R35 BARNEY	$ 100.00
MITCHELL NC/STD BARNEY	100.00
ARRIFLEX IIC BARNEY	100.00
ARRIFLEX SB BARNEY	100.00
ARRIFLEX 16BL MAGAZINE BARNEY	40.00
35BL CAMERA BARNEY 400'	400.00
35BL CAMERA BARNEY 1000'	500.00

MOTORS AND ACCESSORIES

C.P. CRYSTAL MOTOR FOR BNC W/HOUSING	$ 900.00
R35 ADAPTER DOOR FOR/C.P. CRYSTAL MOTOR	400.00
MITCHELL STD HIGH SPEED MOTOR	500.00
MITCHELL SR35 HIGH SPEED MOTOR	650.00
MITCHELL STD VARIABLE SPEED MOTOR	250.00
MITCHELL R35 VARIABLE SPEED MOTOR	450.00
ARRIFLEX SB 16 CONSTANT SPEED MOTOR	325.00
ARRIFLEX BL 110 SYNC MOTOR	350.00
MITCHELL 110V STOP MOTION MOTOR	1,000.00
ECLAIR 12V PERFECTONE VARIABLE SPEED MOTOR	350.00
ECLAIR 110V PERFECTONE SYNC. MOTOR	350.00
ARRIFLEX 16SB 110V SYNC. MOTOR	350.00
MITCHELL 220V SYNC. MOTOR	325.00
MITCHELL 110V SYNC. MOTOR	325.00
30 VOLT POWER SUPPLY	150.00
CINE 60 OFFSET MOTOR BASE	175.00
ECE OFFSET MOTOR BASE	225.00
ARRIFLEX III HIGH SPEED ATTACHMENT	900.00
MITCHELL NC/BNC ADAPTER DOOR	175.00
MITCHELL R35 ADAPTER DOOR	175.00
220V AC VOLTAGE REGULATOR	150.00
110V AC VOLTAGE REGULATOR	150.00

TRIPODS, HEADS AND ACCESSORIES

WORRALL GEAR HEAD	$ 3,500.00
RONFORD 15S/B FLUID HEAD	1,800.00
ARRIFLEX GYRO HEAD	250.00
O'CONNOR 100 FLUID HEAD	2,400.00
O'CONNOR 50 FLUID HEAD	1,800.00
ADJUSTABLE WEDGE	180.00
GEARED WEDGE	400.00
ARRIFLEX BABY LEGS	125.00
ARRIFLEX STD. LEGS	125.00
MITCHELL BABY LEGS	200.00
MITCHELL STD. LEGS	200.00
MITCHELL ¾ LEGS	200.00
TRIANGLE W/TIE DOWN CLAMP	35.00

BRACES AND BRACKETS

AIRPLANE BRACKET	$ 225.00
ARRIFLEX BL BODY BRACE	50.00
ARRIFLEX SHOULDER POD	50.00
LEO POD BODY BRACE	35.00

VIDEO

IKEGAMI HL79DA CAMERA W/CANNON 9-118MM ZOOM LENS	$22,000.00
IKEGAMI HL79EA CAMERA W/CANNON 9-118MM ZOOM LENS	26,000.00
SONY BVH500A 1" RECORDER W/CASE	27,000.00
JVC ¾ 4400LU RECORDER	2,200.00
SONY 2611 ¾ RECORDER	850.00
SONY CVM 115 11" MONITOR	125.00
PANASONIC NV9300A ¾ RECORDER	700.00
PANASONIC 19" CT 1910 COLOR MONITOR	300.00

PROJECTORS

AVE 35MM PORTABLE PROJECTOR	$ 850.00

WALKIE TALKIE

MOTOROLA MX340 WALKIE TALKIE: WITH: ANTENNA, 7.5 VOLT NICAD BATTERY, CASE, HOLSTER, BATTERY CHARGER AND HAND MIKE	PACKAGE PRICE: $ 1,100.00

★ ALL ARRIFLEX EQUIPMENT IS BACKED BY ARRIFLEX CORPORATION FACTORY SERVICE

- **CREDIT CARDS ACCEPTED**
- **ALL ITEMS IN EXCELLENT USED CONDITION WITH FACTORY WARRANTY WHERE INDICATED**
- **WE WELCOME SOUTH AMERICAN INQUIRIES**

- ALL ITEMS SUBJECT TO AVAILABILITY AND/OR PRIOR SALE
- FOB—NYC
- PRICES SUBJECT TO CHANGE WITHOUT NOTICE

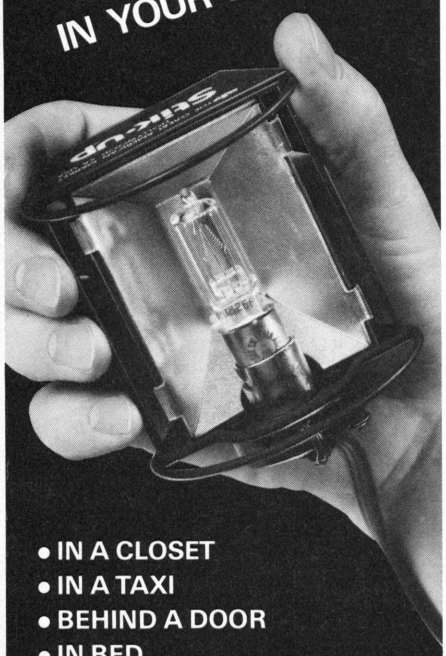
CSC

CAMERA SERVICE CENTER

Camera Service Center, Inc., 625 West 54th Street, New York, NY 10019
Fax: (212) 713-0075 Tel: (212) 757-0906

© 1987 Camera Service Center, Inc.

THERE'S A
Stik·up™
IN YOUR FUTURE...



• IN A CLOSET
• IN A TAXI
• BEHIND A DOOR
• IN BED
• HAND HELD
• UNDER A DIVING BOARD
• IN JAIL
• AT A ROCK CONCERT
• ON A STAGECOACH
• AT A FASHION SHOW
• UNDER A LUNCH COUNTER

It will make your lighting more effective wherever you need to conceal a small compact light source.

Stik-up, ideal for film, TV, stills. Up to 200W. Also 12V for battery operation. Weighs only 8 ozs. with cord. Stick it anywhere. Kit available.

Write or call for info.

Stik·up™

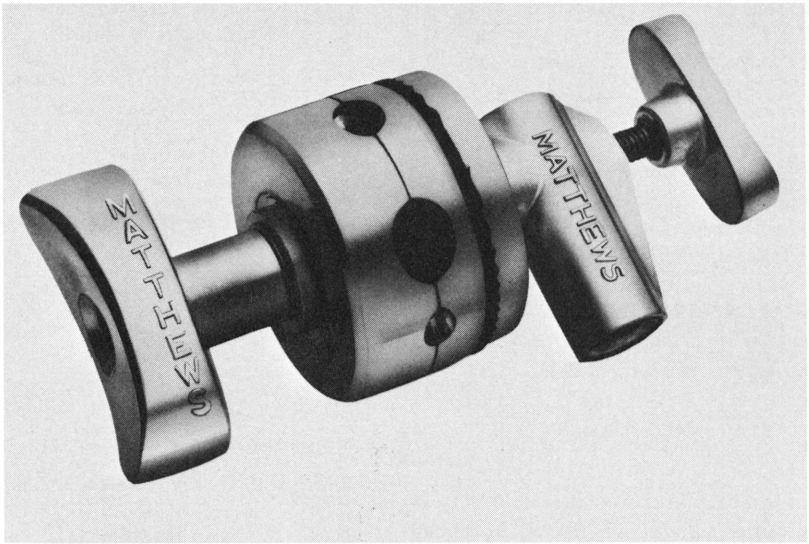
THE GREAT AMERICAN MARKET

826 N. COLE AVENUE HOLLYWOOD CA 90038
TELEPHONE 213·461-0200 · TWX 910 494 1233

©1984

coded with a batch number printed along its back coating for instant identification.

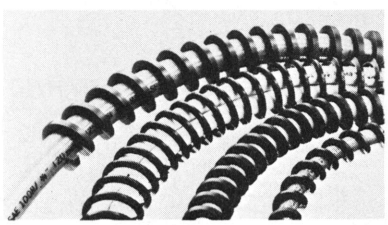
For more information about Agfa-Gevaert's line of audio mastering tape and video tape products contact: Magnetic Tape Division, Agfa-Gevaert, Inc., 100 Challenger Road, Ridgefield Park, New Jersey, 07660; (201) 440-2500.



Matthews Studio Equipment, Inc. is announcing its new 2½ inch grip head which they are calling the "Bull Head." It features a gimbal which allows multi-plates to be expanded into a V-position and locked off.

Coupled with serrated plates and a new design gripper pad, the Bull Head is the strongest grip head ever designed. All 2½" grip heads (as well as the grip heads and gobo arms) are being manufactured with new design features.

For additional information contact Fred Farish, marketing director for Matthews, at (818) 843-6715.



Camera Cable Protectors

A range of expandable, coiled cable protectors has been introduced by the Thordon division of Thomson-Gordon Limited, Burlington, Ontario, Canada.

Called Gard-Flex, the protectors help keep TV and film camera cables quiet in operation, and also protect them from impact and abrasion.

Made from solid polyurethane material, the protectors have a very long life. They can be installed on existing cable systems without dismantling the end fittings. Different sizes cover cables from ½" to 4" (13 to 102mm) in diameter.

For further information, contact: Thomson-Gordon Limited, Box 911, Station "U", Toronto, Ontario, Canada M8Z 5P9. (416) 335-1440.

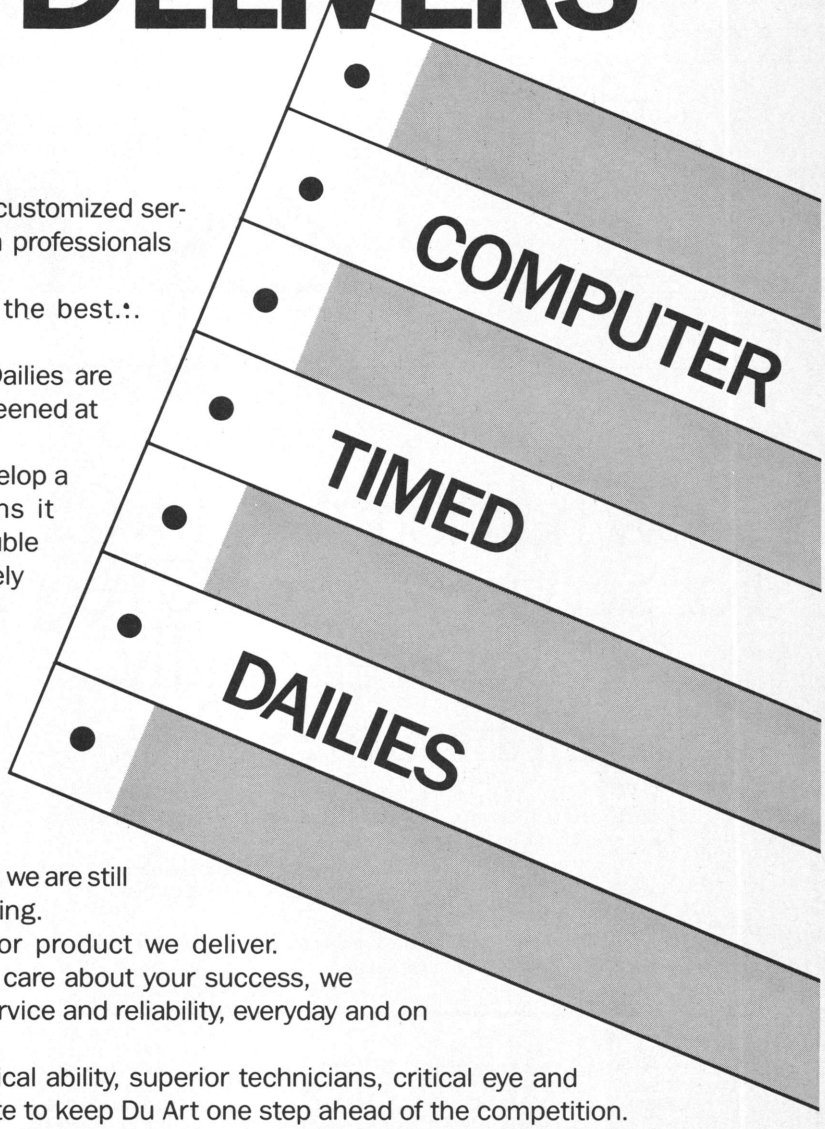
Film Duplicator

Duplication houses seeking an increase in efficiency and quality while filling optical duplication orders may be interested in a new offering from the French firm Companie du Materiel de Micrographie (CMM).

Unlike most optical printers which employ a costly quartz cylinder for the straight duplication of master prints, the DZ1 diazo duplicator with integrated film developer uses a less costly 400-watt mercury exposure lamp. More than just a cost advantage, this innovation does away with the need to thoroughly and frequently clean the quartz lamp to prevent minute dust specks from being reproduced on the copied film. The mercury lamp itself is held by a plug-in holder, making replacement a snap.

Also easy to service is the duplicator's plug-in electronic circuit board for quick and easy maintenance tasks. This lightweight (99 lb.) package, which is a

DU ART DELIVERS



Du Art delivers and delivers...

In fact, we've been delivering our special customized service, with state-of-the-art equipment, to film professionals for over 60 years.

You demand the best. Du Art delivers the best.:. DAILIES.

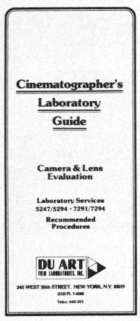
We deliver Dailies in a special way—all Dailies are double cleaned and computer timed and screened at regular speed, not high speed.

Our dedication to excellence led us to develop a process which takes the Dailies and runs it through our liquid cleaner two times! A double protection to ensure every scene is completely free of any imperfections.

Du Art also delivers the most comprehensive scene-by-scene exposure report in the industry. Our specially designed projector, running at regular speed, allows for stop and back-up viewing to check every frame! We call it—Du Art's analytical stop-frame projector.

Even with these extra protective processes, we are still the only East Coast lab able to offer Daylighting.

That's why we are proud of the superior product we deliver. Because we understand your problems and care about your success, we deliver the best in quality, service and reliability, everyday and on every job.



And, our innovative technical ability, superior technicians, critical eye and professionalism, all contribute to keep Du Art one step ahead of the competition.

Don't let another day go by without using Du Art's technically advanced Dailies techniques.

Du Art, the best name in Dailies because Du Art delivers and delivers...

To share our expertise with you, we offer free technical advice and have also prepared a series of subject brochures for your information. For your free copy, please call Frank Bucci, Tim Spitzer or Linda Young.

DuArt Film
DuArt Video

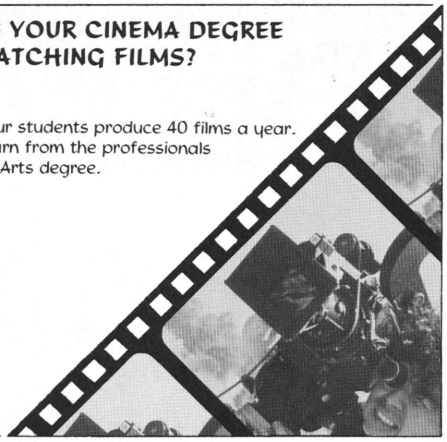
Delivering Excellence In Quality and Service For Over 60 Years!

Du Art Film Labs, 245 West 55th St., New York, NY 10019 212-757-4580
Du Art New England, 39 Chapel Street, Newton, MA 02158 617-969-0666

TELEVISION CINEMA COMPUTER GRAPHICS

ARE YOU EARNING YOUR CINEMA DEGREE BY JUST WATCHING FILMS?

At Columbia College our students produce 40 films a year. Study in Hollywood and learn from the professionals while earning your Bachelor of Arts degree.



COLUMBIA COLLEGE
925 N. La Brea Avenue
Hollywood, California 90038
(213) 851-0550

Financial Aid Available

When You Ask TVC For Service, Over 100 People Take It Personally... 24 Hours A Day.

Film-making is a collaborative effort. It takes dedicated clients and technicians—working creatively and productively—to assure excellent results.

For nearly 20 years, that's the way TVC Labs has been working. And this unity *still* is working today and will continue to work tomorrow.

"Ask any of the people listed here. They'll take your request for service seriously—and personally."

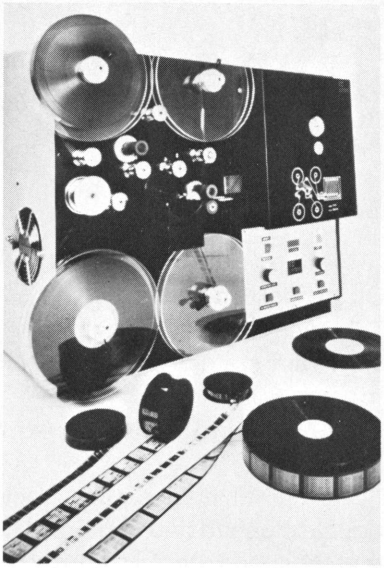
—DAN SANDBERG President & CEO

SILVIO ALESANDRINI
FRANK ALIPERTI
ANDERSON ALLEYNE
CHARLES AMOROSO
JOSEPH BARBIERI
GIUSEPPE BARILA
SALVATORE BASSO
STEPHEN BAUM
PHILIP BENANTI
ROBERT BRACALONI
LOUIS CANGIANO
CARL CANTARELLA
VINCENT CASALE
MARIO CASCIO
IGNATIUS CASTALDO
JOSEPH CERAVOLO
SALVATORE CERVONE
BEVERLY CIANA
DON CIANA
ALEX COLON
ANDREW COLON
BERNARD COOPER
LESLIE CORDY
FERNANDO CORTINAS
LLOYD CREATURA
ANTHONY CREVANI
ROBERT CREVANI
LEROY DAVIS
ERNEST DECOTIIS
LINDA DE SANTIS
LEONARD DE WAR
EDWARD DUFFY
GEORGE DUTTENHOFER
ALBERT FIDANZA
JOHN FOX
MELYSSA FRIEDMAN
CHARLES GIFFORD
DOMINICK GIUFFRIDA
CHARLES GOLDSTEIN
HOWARD J. GOLDSTEIN
EDITH GOODMAN
ROGER GOULD
CHARLES GRIFFITH
ELIZABETH GROSS
ROBERT HAMILTON
FRED HOLY
DANIEL HOUGH
JACK KAMINSKY
ARNOLD KAYE
DONALD KEENAN
JAMES KING
EDWARD KMET
RONALD LEPORE
ONOFRIO LICARI
RICHARD LICHIOVERI
JOANNE MANFREDI
ROBERT MARINO
JENNIFER MCKOY
MICHAEL MCNAMARA
JOSEPH MERCADO
JOSEPH MILAZZO
RICHARD MINI
JAMES MOBLEY
PETER MONTENEGRO
ROBERT MORAN
WILLIAM NEVERMAN
ANIELLO NOBILIONE
JAMES NORWOOD
JORGE OCAMPO
ANTHONY PAGNANI
MAURO PALOMBA
RAJANI PARIKH
ANTONIO PILEGGI
FRANK POMPOSELLI
FRANK REALI
DOROTHY RELLA
VINCENT RELLA
FEDERICO RODRIGUEZ
RAMON RODRIGUEZ
ARTHUR ROESCH II
ARMAND RUGGIERI
ANGELO RUSSO
NELSON SALCEDO
JOHN SALVATORE
ANTONIO SANCHEZ
DANIEL SANDBERG
CHARLES SANDERS
CYNTHIA SCARBOROUGH
ROSANNE SCHAFFER
SALVATORE SCIUTO
LEON SHAPIRO
HECTOR SOSA
GEORGE STOLL
CHARLES SUNDMAN
JULIO TAVARES
JOAN TIERNEY
SALVATORE TREZZA
JOSEPH TRUGLIO
MARINA VENEZIA
PETER VERILE
MICHAEL VICTOR
HENRY WALTERS
NANCY WECHSLER
TERANCE WILLIAMS

We couldn't have done it without you.

Celebrating Our 20th Anniversary—July 1987 tvc

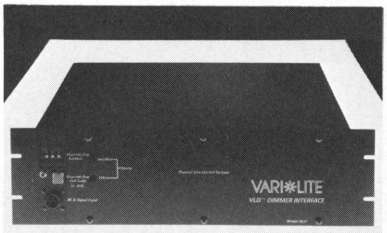
TVC laboratories, inc. 311 West 43rd St., New York, NY 10036 (212) 397-8600
Toll-Free 1-800-225-6566



compact 29½" x 24⅜" x 18½", is powered by a 110/220-volt heavy duty motor for exceptional reliability and prolonged life. As for versatility, the DZ1 handles both 16mm and 35mm film stock on 100 to 2,000 foot reels. Adjustable duplicating speeds of 10 to 110 feet per minute are also available.

The instantaneous film development system uses high temperature liquid ammonia (176° F), but does not require outside ventilation of any kind. Instead, an internal air suction pump contains the gas inside the airtight duplicator.

For further information, contact: FRENCH TECHNOLOGY PRESS OFFICE, 401 N. Michigan Ave., Suite 601, Chicago, IL 60611, Tel: (312) 222-1235.

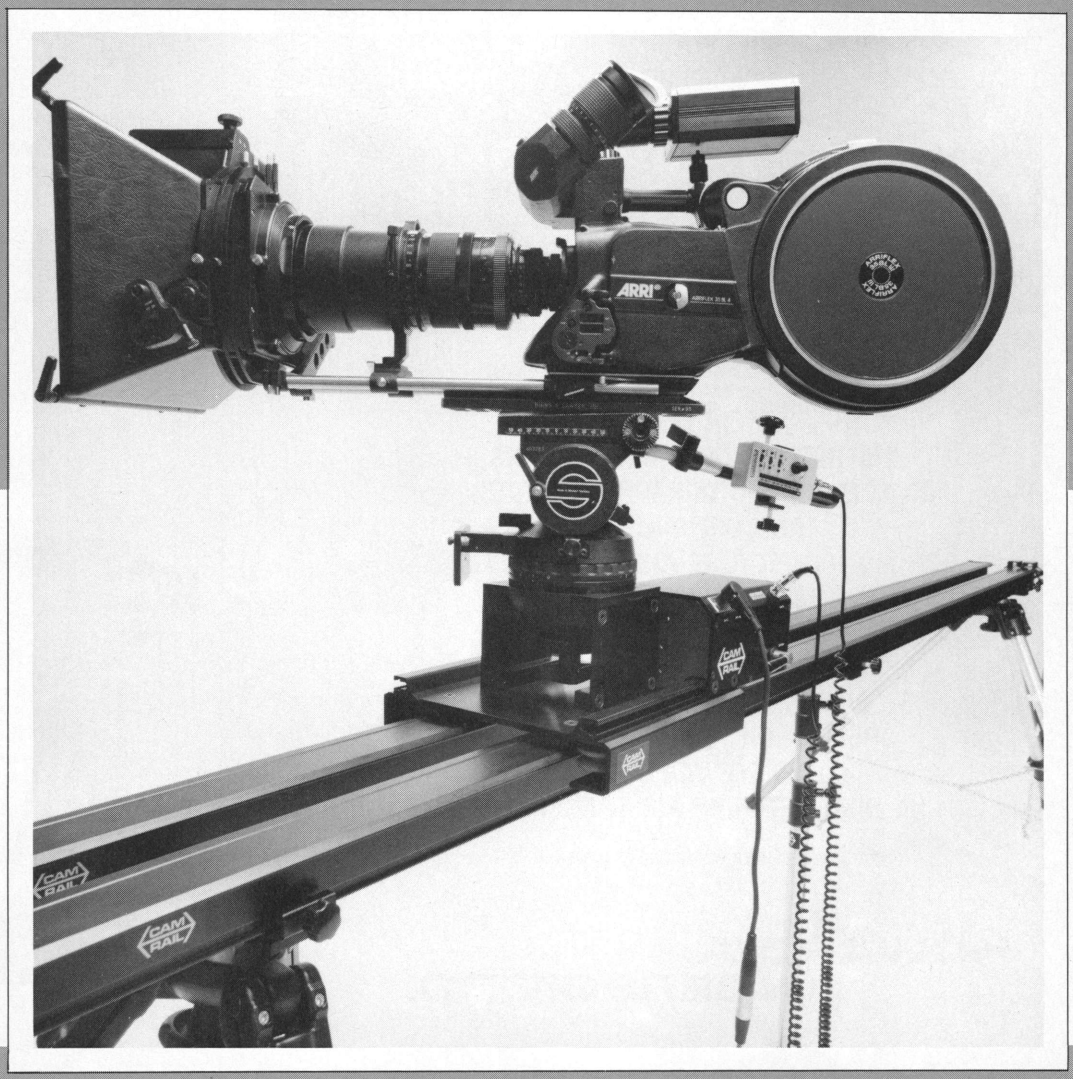


Dimmer Interface

Vari-Lite, Inc., the Dallas based automated lighting company, has announced the introduction of the VLD dimmer interface, the link between the Vari-Lite Series 200 TM system and any device typically controlled by a conventional board.

The VLD dimmer interface enables the control of any lighting equipment or other relay-controlled device operated on

new move



Birns & Sawyer announces the Twin Cam-Rail.

Twice the rail for twice the support.

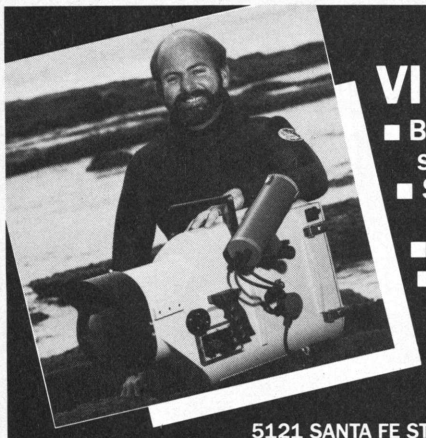
The original single rail Cam-Rail was introduced a few years ago and received enthusiastic response, but was limited to lightweight video and 16mm cameras. Now the Twin-Rail opens up exciting possibilities for feature film and commercial production. Dolly shots where a dolly cannot easily go—over uneven terrain, across car hoods, through car windows, remoted across the front of a stage, angled along stair railing, or wherever your imagination takes you.

For mounting directly onto a flat surface such as a table or floor, a leveling bracket is used instead of a tripod. Or for use with an inverting head, like a Ronford 7, overhead supports allow for the rails to be inverted, thereby supporting the camera from above—perfect for low angle or table top work. A 12V DC motor allows for remote control capability. Rails are easily linked together for unlimited extension (although 45° and 90° curves are only available for the single rail system).

Systems are available for sale or rental.

BIRNS & SAWYER, INC.

1026 N. Highland Ave., Hollywood, CA 90038 213-466-8211
FAX 213-466-7049 TELEX 673280 Cable BIRNSAW



UNDERWATER
VIDEO PRODUCTION

- Betacam and Ikegami camera systems
- Service to the broadcast and industrial markets for ten years
- Underwater stock video footage
- Discover the quality and advantages of underwater production in video

BOB SLOAN

5121 SANTA FE ST. #D, SAN DIEGO, CA 92109 619-488-6360

a 0–10 voltage, with an adjustable full-scale output of +7 to +13 Vdc. Intensity and intensity timing data is stored in the VLD for each device and is accessed, with split second accuracy, via the Artisan control console.

A bi-directional high-speed digital data link to the Series 200 system provides each dimmer interface with the capability of controlling 96 devices and up to ten dimmer interfaces can be used in the system. The Vari-Lite Series 200 system, comprised of the Artisan control console, VL2 spot and the VL3 wash luminaires, was first introduced in November, 1986.

For more information: Vari-Lite, 201 Regal Row, Dallas, TX 75247. (214) 630-1963.

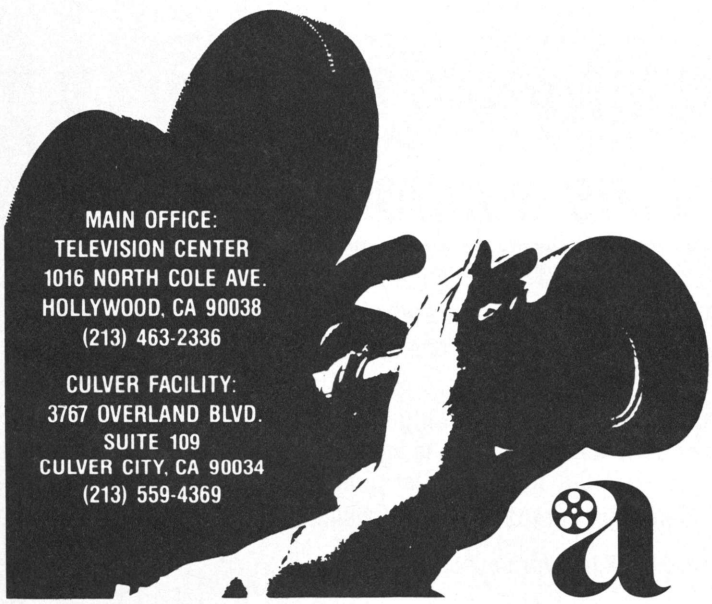
SINCE 1927

CREATORS
OF DISTINCTIVE IDEAS AND DESIGNS
FOR SPECIAL PHOTOGRAPHIC EFFECTS
AND OPTICALS
FOR MOTION PICTURE AND TELEVISION.

TITLES • MOTION CONTROL GRAPHICS
MINIATURES • MATTE PAINTINGS
BLUE BACKING • INSERTS
SPECIAL UNIT PHOTOGRAPHY
COMPLETE VIDEO LAB
ONE INCH NETWORK AIR TRANSFERS

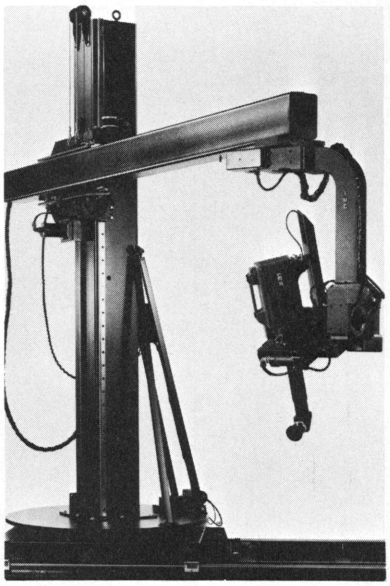
B & W TEMP DUPES • 1:1 SOUND TRANSFERS

HOWARD A.
ANDERSON CO.



MAIN OFFICE:
TELEVISION CENTER
1016 NORTH COLE AVE.
HOLLYWOOD, CA 90038
(213) 463-2336

CULVER FACILITY:
3767 OVERLAND BLVD.
SUITE 109
CULVER CITY, CA 90034
(213) 559-4369



Camera Mover System

Interactive Motion Control (IMC) features the nodal-point camera mover system for film or video. The optional periscope package allows the user to get a close-up or wide angle perspective; the package includes wide angle lenses down to 1.9mm. The system offers great flexibility of movement in a motion control system—12–60 feet of track travel, 8 feet of camera lift, 5–7 feet of horizontal movement, and ±360 degrees of pan, tilt and roll. An additional option is ±360 of column rotate which allows up to 16 feet of sweep.

The system consists of IMC 3565 motion control computer for control of 8 motorized axes, 2 on the zoom lens to control zoom and focus, 3 on the cart to control e/w, n/s and track and 3 on the

RICK RAPHAEL

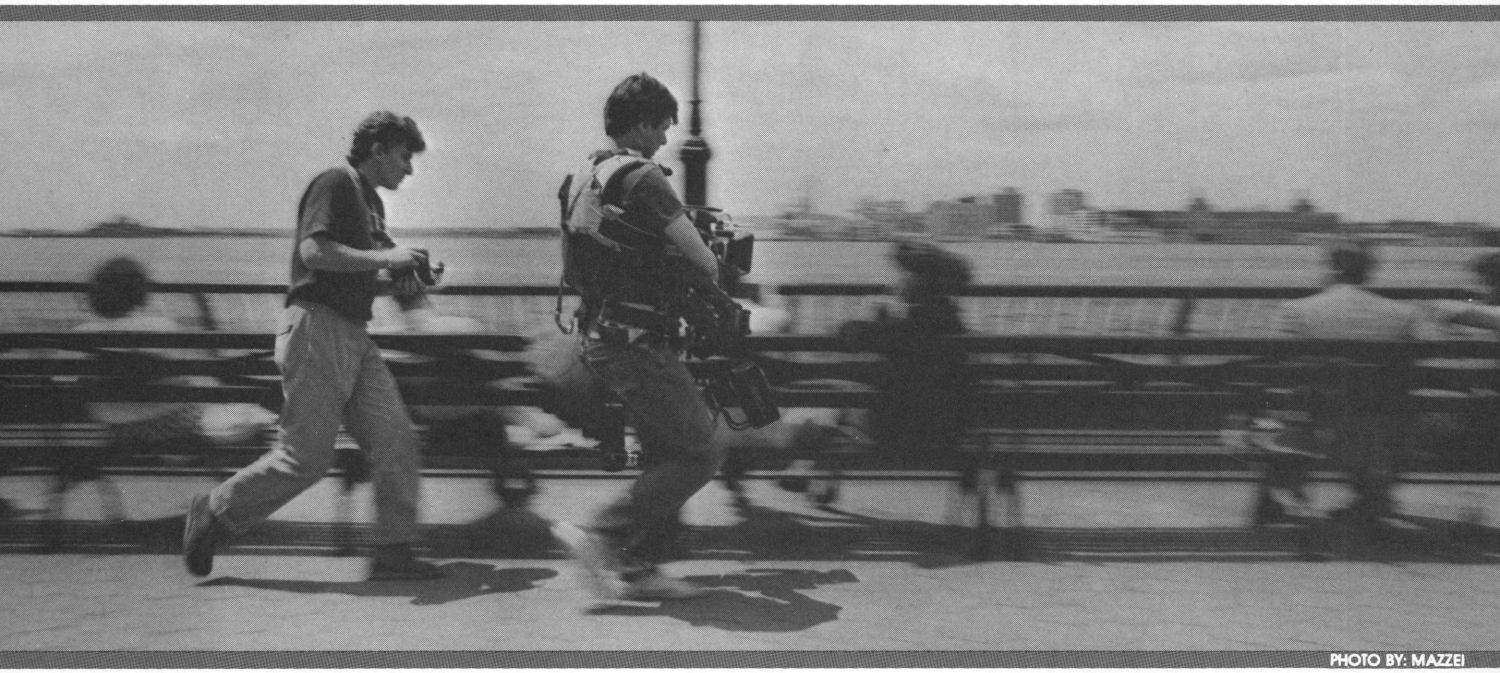


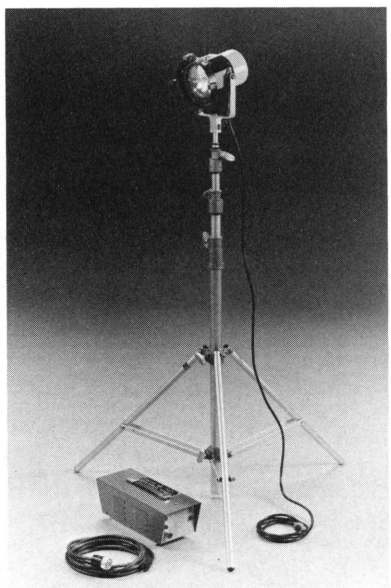
PHOTO BY: MAZZEI

STEADICAM PHOTOGRAPHY

AGENT: ANDRAYA KULINYI • 212 475 3410

camera head for pan, tilt and roll; also a 16-foot section of precision track, a track cart, a 10-foot column mounted on the track cart, n/s rails and drive mounted on the column, an e/w movement mounted on the n/s rails and a nodal-point camera head designed for a 35mm film camera or an ENG video camera.

For information on other options: Interactive Motion Control, 8671 Hayden Place, Culver City, CA 90232. (213) 559-6146.



Cinepar 200

LTM has introduced the first professional mini-par light. It was shown for the first time in the United States at the 1987 SMPTE Convention in Los Angeles and is available for rental at all LTM regional offices in Hollywood, Detroit, New York and Ft. Lauderdale, Florida.

This 200 watt HMI PAR 36 fixture puts out more light than a blue-gelled 1,000 watt incandescent and is much, much smaller. You can tuck it away in the tightest of places and still get incredible power.

This LTM Cinepar 200, like its bigger brothers, the 575 and 1200, comes with four interchangeable lenses to give a very narrow spot, narrow spot, medium flood and wide flood.

For further information: LTM, 1160 N. Los Palmas, Hollywood, CA 90038. (213) 460-6166.

Stand-by Power Source

A new generation standby power source that features an ultra-quick transfer time of 1 millisecond and full AC power conditioning capabilities is being introduced by Sola, a unit of General Signal. The new SPS/R offers a third alternative for blackout protection by providing almost all the performance of an uninterruptible power system but at a price closer to a conventional SPS.

Equipped with an electronic regulator, the new SPS/R is ideally suited to protect sensitive electronic equipment such as computers, test instruments or terminals from all types of AC power problems including line noise, voltage irregularities and brownouts, as well as blackouts. With this portable, plug-in unit, users will no longer need to be concerned about oversizing their power protection equipment to meet the peak current demands of switchmode power supplies. Because of the SPS/R's ability to operate a 3:1 crest factor load, the peak current demands of equipment driven by switching power supplies can be met easily while maintaining essential voltage requirements. For protection against load inrush, the SPS/R's overload capacity ranges from 1400% for one cycle to 300% for 10 seconds.

When normal AC power is present, the SPS/R's 95%-efficient regulator carries the input sine wave through with less than 1% added harmonic distortion. The regulator also maintains output voltage within +5% to −8% for AC input voltage variations up to +15% and down to −25%. This contrasts with conventional standby systems, which provide no voltage regulation and allow AC line voltage to drop almost 15% before the inverter/battery begins to supply power, forcing the unit's load equipment to operate on voltage as low as −15%.

If input voltage dips below −25% of nominal, the SPS/R transfers to inverter/battery power and supplies output voltage within ±2% of nominal with less than 5% total harmonic distortion (a true sine wave). With this combination of performance specifications, the new SPS/R not only protects its load from the extremes of line voltage fluctuations, but also conserves battery reserve by not drawing upon battery power during voltage sags unless they exceed −25%.

For more information on Sola's new SPS/R models and other power protection equipment, contact Sola, A Unit of General Signal, 1717 Busse Road, Elk Grove Village, IL 60007. Telephone: (312) 439-2800. △

PANAVISION®

WORLDWIDE REPRESENTATIVES

AUSTRALIA
SYDNEY
SAMUELSON FILM SERVICE PTY. LTD.
61-2-439-6955

MELBOURNE
SAMUELSON FILM SERVICE PTY. LTD.
61-3-646-3044

CANADA
MONTREAL
PANAVISION (CANADA) LTD.
514-866-7262

TORONTO
PANAVISION (CANADA) LTD.
416-752-7670

VANCOUVER
PANAVISION (CANADA) LTD.
604-873-3901

CHINA
BEIJING
SALON FILMS (HONG KONG) LTD. c/o CHINA FILM EQUIPMENT CO.
86-1-2013493

FRANCE
PARIS
SAMUELSON ALGA CINEMA
33-1-4-328-5830

GERMANY
MUNICH
FILM-GEREATE-VERLEIH
49-89-690-7070

HONG KONG
CAUSEWAY BAY
SALON FILMS (HONG KONG) LTD.
85-2-376-43123

ITALY
ROME
A.R.C.O. DUE
396-749-0896

JAPAN
TOKYO
SANWA-CINE EQUIPMENT
81-3-404-0366

MEXICO
MEXICO CITY
TRATAFILMS, S.A.
905-680-3500

PHILLIPPINES
MANILA
SALON FILMS (PHILLIPPINES) LTD.
63-2-881691

SCANDINAVIA
STOCKHOLM
FILM AB RUNE ERICSON
468-734-3845

SPAIN
MADRID
CAMARA RENT
341-733-4131

BARCELONA
CAMARA RENT
34-3-323-2491

THAILAND
BANGKOK
SALON FILMS (THAILAND) LTD.
66-2-252-8591

UNITED KINGDOM
LONDON
SAMUELSON FILM SERVICE (LONDON) LTD.
44-1-452-8090

UNITED STATES
CALIFORNIA
TARZANA, LOS ANGELES
PANAVISION, INC.
818-881-1702

HOLLYWOOD
GENERAL CAMERA WEST
213-464-3800

SAN FRANCISCO
CINE RENT WEST/STAGE A
415-864-4644

FLORIDA
MIAMI
CINE VIDEO TECH
305-754-2611

GEORGIA
ATLANTA
VICTOR DUNCAN, INC.
404-355-3001

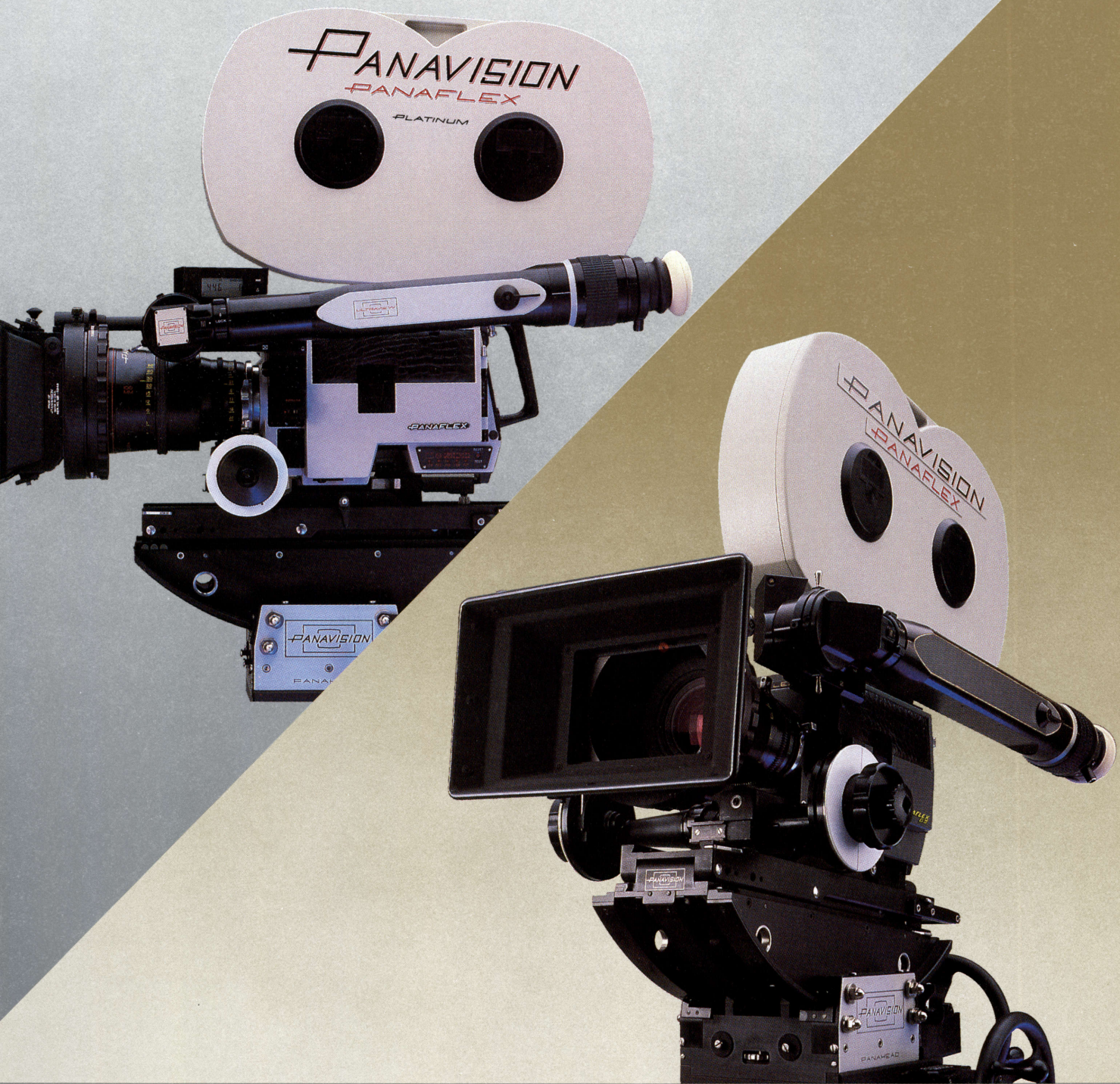
ILLINOIS
CHICAGO
VICTOR DUNCAN, INC.
312-943-7300

MICHIGAN
DETROIT
VICTOR DUNCAN, INC.
313-471-1600

NEW YORK
NEW YORK CITY
GENERAL CAMERA
212-594-8700

TEXAS
DALLAS
VICTOR DUNCAN, INC.
214-869-0200

S U C C E E D



Some people in the film business say success depends
n who you know. Our experience at Panavision says it's
hat you know, and how you do it. We build the most
agnificent cameras in the world. And it's interesting that
e talented, hard-working visionaries who use them also
ppen to be quite successful. All of the Cinematographers
ominated for this year's Emmy Awards and over 70% of
e Oscar nominated Cinematographers in the past five
ars chose Panavision cameras for their productions.
The Platinum Panaflex stands clearly in a class by itself.
ne quietest and brightest camera in the world, it is also
the smartest, offering state of the art electronic information and a full range of new accessories to complete the system. The GII is the new industry workhorse. As responsive and reliable as the Golden Panaflex, technological advances are making it the most sought after camera of its kind. Best of all, at the heart of both cameras exists the steadiest and most experience proven camera movement ever made — a Panaflex.

Here's to your continued success using the finest motion picture cameras in the world. The Platinum and GII are ready and waiting...at your service.

PANAVISION®

18618 Oxnard Street, Tarzana, California 91356 • Telephone: (818) 881-1702 • Telex: 651497, PANVISION TZNA • Fax: (818) 342-8166



Wild Horses, Wild Times

by John Howe

The jingle of spurs breaks the quiet of early morning. Red clouds scrape the sky. A murmur. The sound of hooves. Ever closer. Red dust on the horizon. The wind but a rustle. Pounding hooves hammer the silence into submission.

Wild horses!

Crows hesitate above a barbed wire fence. Below a vermillion cliff, the juniper conceals the action. Fluffy thunderheads billow, predicting a storm. Without warning, wild horses explode from the bush running at breakneck speed. Cowboys follow in fast pursuit careening over boulders, the thorns of the bush scraping their chaps.

The black stallion with the blazed forehead lingers at the rear. The head wrangler whirls, rope at the ready, flailing the air. The stallion races for escape, the cowboy close at his heels. Both are running at full speed, oblivious to the terrain. The whirling lariat signals the end of freedom. The horses are roped in the confines of an amphitheater naturally formed in the valley below.

Nothing is more reminiscent of the American West than wild horses. The romance of the wild horse haunts the deserts and mountains of the West provoking nostalgic pictures of simpler, better times. "Mustang" paints word images of freedom and wilderness. These wild steeds with flowing manes and swirling tails throw caution to the wind, running wild through vast meadows in imaginary mountains. But like a western movie, the distinction between romance and reality is often blurred. As with most things wild in the current age, the wild horse has become the center of controversy.

The concept for *Wild Horses, Wild Times* came from an earlier production which was produced by KUED/7 for PBS entitled *Troubled Waters. Troubled Waters* concerns a white water adventure down the Colorado River and an examination of the associated environmental issues of the Colorado. In the introductory narration by Edward Asner, aerial footage of wild horses was used for visual support. The natural beauty of these shots initiated an idea for a story about wild horses as a documentary. The aerial shots of wild horses were dramatic and exciting but something else was needed and that was a sense of importance. Further research substantiated that importance.

A controversy raged between livestock interests on one side and wild horse protectionists on the other. Livestock interests look at the wild horse as a feral, non-native intruder causing destruction of western public rangelands. They want that range for sheep and cattle grazing. Horse protectionists argue that the wild horse does miniscule damage to the range and should be protected by the 1971 Wild Horse and Burro Act. The U.S. Bureau of Land Management is in the middle of the issue and provoked argument by implementing extensive roundups of wild horses on public lands. A report was also initiated recommending killing excess horses removed from western rangelands. Horse protectionists argue that the BLM is bowing to pressure from livestock interests.

At any rate, research confirmed the elements for a very good project: a dynamic issue painted upon a dramatic canvas with a sense of timely importance.

Wild Horses, Wild Times was submitted as a project proposal to Toni Egger who is director of program development for *National Geographic Explorer* in February, 1987. By March, the project had been approved for production. As is often the case, events controlled the shooting schedule. Production began almost as soon as the project was approved.

Jeff Elstad, production assistant, had determined that a roundup was going on in the Pryor Mountains of Montana. The Pryor Mountains are the nation's first wild horse refuge and therefore of significance. With little preparation, we got on the road and drove through a howling snowstorm from Salt Lake City to Lovell, Wyoming, a small town on the Montana-Wyoming border.

The rest of the crew was rounded out by myself as producer-director and cinematographer, associate producer Elizabeth Searles, Elstad, and soundman Mike Miles. This was a seasoned crew, all of whom had worked together as a team on numerous PBS documentaries. Upon arrival in Lovell, the weather miraculously cleared and we were treated to a romantic vision of the Old West.

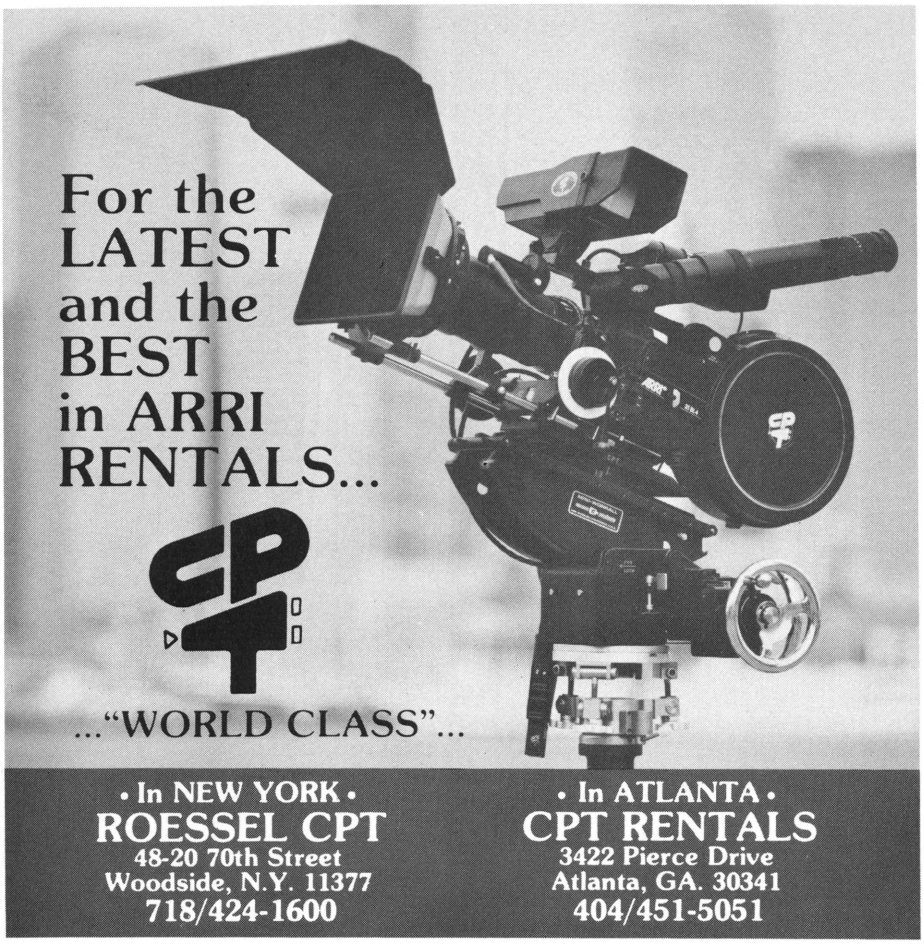
Britton Springs is a wild horse holding facility run by the U.S. Bureau of Land Management. Lynn Taylor and the cowboys of Britton Springs were preparing for a wild horse roundup in the Pryor Mountains. Smoke rises from the fireplace as saddles are brought from the bunkhouse and placed near the wooden corral. Saddle horses are roped and prepared for the day; lariats are unlimbered. The whir of the ropes intrudes on cowboy conversation. Leather creaks as saddles are cinched and tightened.

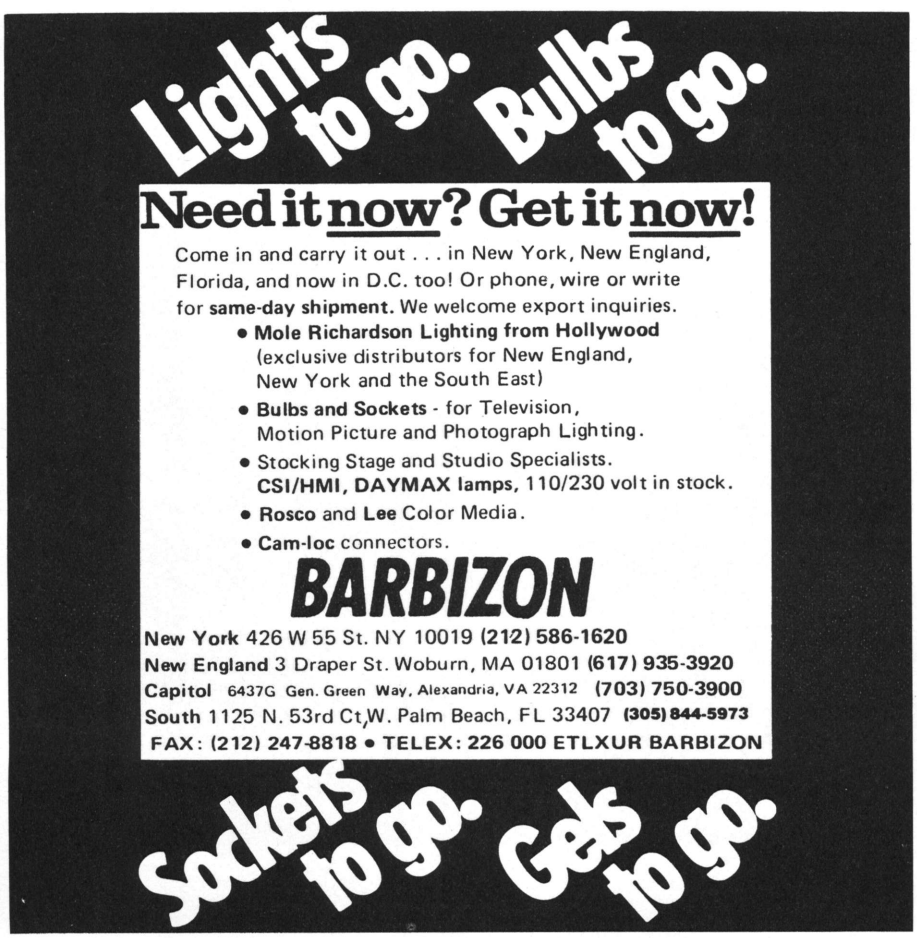
The cowboys load the saddle horses in trailers for the short ride to where the roundup will begin. After arrival, we wait at our camera position as the radios crackle with communications. A sense of excitement pervades as the cowboys search for the wild band. A small band of bighorn sheep look down at our camera position. Suddenly, wild horses are running directly at our camera position with cowboys in pursuit. They are roped and transported back to Britton Springs.

At Britton Springs, the sorting and preparation for adoption begins. The BLM has an adoption program whereby the public can adopt or buy a wild horse. The horses are forced into the roping arena where they will be lip-tattooed for identification. One of the wranglers has backed up a flatbed truck against the corral for our camera position.

The wild stallion sprints, lariats whirling behind him. The noose settles around his neck as his eyes bulge in protest. As he stomps and snorts around the arena, another rope circles his back legs and with an abrupt halt, he is flipped to the ground and held fast. He is







tattooed for identification and released to the holding pens. Horses which are not to be adopted are released back to the wild. The horses bolt the corral to freedom. The black stallion is the last released. His whinnied calls reflect the joy of a wild thing—freed.

Wild Horses, Wild Times was filmed principally on 16mm ECN 7291 stock with ECN 7292 used for the high speed sequences. The equipment package is built around the Cinema Products GSMO package. The GSMO is the ultimate adventure camera. It offers light weight combined with useful features such as quick-change co-axial magazines, orientable viewfinder, compact battery system, and built-in variable speed motor to 64 fps. The quietness and crystal sync capability are also very advantageous. At KUED/7, we normally shoot a combination of Betacam and film on our documentary projects. It's a system that's been proven on shooting grizzly bears in Alaska, white water on the Colorado River, and hang gliding in western mountains.

The high speed sequences were shot with an Arriflex HSR at 150 fps and with a Canon 150-600 f/5.6 lens. The lens complement for the GSMO consists of an Angenieux 12-240 zoom, Angenieux 12-120 zoom, and 5.7 Tegea wide angle.

Even though quite heavy, the 12-240 Angenieux has become my standard lens for wildlife shooting. I've used it for years with good results on football highlight films and find the extra length over a more standard 12-120 very advantageous. The 12-240 was customized for us by Derrick Whitehouse in Los Angeles for the GSMO with a custom mount and built-in Cinema Products J-5 zoom control. We utilized a number of time-lapse sequences of building thunderstorms and sunsets with moving clouds in *Wild Horses, Wild Times*. These were shot with an Arriflex-S and the Norris intervalometer.

The concept for *Wild Horses, Wild Times* was to follow a

"...when the light is not enough."

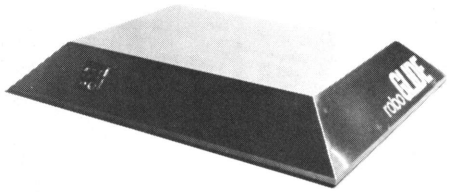


COLOR MAGIC

Filters for the demanding professional · corals · magicgrads · N.D's. · diffusion · customized to your specifications.
Write or call: Bing Sokolsky, Color Magic Filters, 1277 Leona Drive, Beverly Hills, CA 90210 · 213-271-6105

Major Breakthrough in Motion Technology

ELICON RE-INVENTS THE WHEEL



WITHOUT THE WHEELS — roboGLIDE

WHAT IS IT?
The **roboGLIDE** unit is a unique trackless, wheel-less dolly system which uses a patented levitation principle. Because no wheels contact the floor, **roboGLIDE** offers a level, smooth movement of up to 1500 pounds over nearly any solid level surface. Using any of several optical guidance systems, this unit can provide repeatable motion. With the motion control interface option, repeatable moves can be programmed on any motion control system.

WHAT IS IT FOR?
roboGLIDE can be used for many purposes. You can put a floor dolly or pedestal on it to achieve the smoothest motion possible. You can link multiple **roboGLIDE**s together to move entire scenes, cars or backdrops on cue, silently. Props, large or small, can be moved silently during production. And, of course, trackless motion control is now a reality with any motion control system, stepper or servo.

WHY NOT TRY IT?
roboGLIDE is available from many distributors— *Ceco International, Cinema Products, Matthews Studio Electronics, Vinten Equipment,* and *W. Vinten Limited,* to name a few. Complete systems are available for rent, lease or sale. Call for further information.

ELICON®

940 South Leslie Street • La Habra, California 90631-6854
(714) 870-6647 • FAX (714) 870-6697

NEW

GEARFAX® MOTION PICTURE DATA SYSTEM



- A CAMERA MANUAL THAT NEVER DATES!
- FIRST ANNUAL UPDATE FREE!
- LATEST PRODUCTS AND SPECIFICATIONS.
- COMPLETE IN ITS OWN HANDSOME BINDER.

INCLUDES:

- 35mm CAMERAS
- 16mm CAMERAS
- GEARED HEADS
- FLUID HEADS
- DOLLIES
- CRANES
- SUPPORT SYSTEMS
- FILM STOCKS

Please send me _____ copies of GEARFAX Manual @ $49.95 each.
I enclose cheque/International money order made payable to:
'GEARFAX LTD' for $_____ (add $3.50 postage U.S. $5.00 Foreign)

NAME: _____

ADDRESS: _____

CITY _____ STATE _____ ZIP _____

TO: GEARFAX LTD., P.O. BOX 84574, LOS ANGELES, CA. 90073.
(Please allow 6–8 weeks for delivery. U.S. funds only).

single horse from the roundup through the adoption process. The next step was to film a roundup in the Red Desert near Rock Springs, Wyoming. With the cooperation of Jack Steinbreck from the BLM we were able to film a roundup quite different from the one in Britton Springs.

Here, cowboys ride helicopters and use modern techniques to roundup wild horses. A young filly, number 8049, was selected to follow through the adoption process. She was finally adopted by 16-year-old Sheri Ross and we were able to document this process on film. Extensive location shooting was done in Washington, D.C., a slaughterhouse in North Platte, Nebraska, and in Bozeman, Montana where we visited Joey Deeg who has adopted 36 mustangs. A swing was made through Nevada to document wild horse issues there. As with most wildlife photography, the weather can be uncooperative at times, such as our crew being pelted with hail in the Nevada desert while waiting for wild horses.

Dramatic footage came from the second roundup which was filmed in Wyoming's Red Desert. We had contracted with helicopter pilot Ron Shane to shoot aerials of the horses. Ron uses an older bubble-top chopper. It was decided to forego a Tyler mount or other such stabilizing device because of lack of space inside the helicopter. The aerials were shot with the GSMO and 12-120 lens and at 64 fps to even out the vibration. Without a mount, it was quite an experience shooting out the door of the old chopper. Although secured by a seat belt, it was necessary to lean out the door to get a clear shot of the running horses free of the helicopter body. Shane proved to be a master of keeping the helicopter in pace with the fleeing horses, resulting in some dramatic footage.

In order to get a shot of wild horses running directly over the camera with cowboys and the helicopter in the background, we designed a plexiglass housing for

our GSAP remote camera. The GSAP is a small 50′ cartridge load camera that can be triggered by remote control. We used the GSAP with a 10mm Angenieux lens, with which we have had great success shooting hang gliding and other "specialty" shots.

The plan was to bury the plexiglass housing and have the horses run over the top when herded toward the trap. Unfortunately, the ground proved too hard to dig in. It was decided to use the GSAP without the housing and it worked. With perfect placement by Elstad, the wild horses ran directly over the camera position and resulted in probably the most memorable moments in the film. Cameras were also filming from other angles and the result was a series of dramatic match cuts. Even though the horses knocked a large rock onto the camera, the camera made it through unscathed.

Most of the long lens work was also done at this roundup. Using the Arriflex HSR and Canon 150-600mm zoom, we were able to get some dynamic close-ups and slow motion effects. This proved to be some of the most challenging shooting of the entire project. The wild horses would be running full-speed at the camera which was racked out at 600mm. Shooting at F/5.6 and at 150 FPS, the focus spot was constantly changing and follow-focusing was necessary throughout the entire range.

Wild Horses, Wild Times was produced using traditional film editing techniques. Two Moviola 6-plate flatbeds were used in the editing process. All processing of the original negative and composite printing was done at Alpha Cine in Seattle. Original music was composed and mixed by Fred Karns in Washington, D.C. △

John Howe was the producer/cinematographer for Wild Horses, Wild Times *and is an award-winning documentary filmmaker. He has won Cine Golden Eagle awards for excellence on two of his productions.*

"The Production Bible."
—Norman Jewison/Patrick Palmer, Producers



"The Brooks' Standard Rate Book"

This 350-page book, published annually, reflects the most current, accurate information on Hollywood union/guild salaries, contracts and regulations affecting Directors, Actors, Technicians, Writers, Musicians, and others employed in the Motion Picture, Television and Videotape industry.

This book is used throughout the country to budget all features and television series. It is also used in computing payrolls, auditing production costs and employing craftspeople.

Motion Picture production companies throughout the world use this invaluable tool as a comparitive production guide.

BOOKS
FOR LOW-BUDGET FILMMAKERS



- Production
- Budgeting
- Union/Guild Wages
- Television
- Camera/Lighting
- Directories/Sourcebooks

Titles include:
The Movie Business
The BROOKS' Commercial Production Directory
Producing for the Home Video Market
Independent Feature Film Production
Making Films Your Business
The Film Industries
Producing TV Movies
Professional Cameraman's Handbook
How to Get Grants for Films & Video
& much more

YOU CAN'T SHOOT A PICTURE WITHOUT A BUDGET!



"The Hollywood Guide to Film Budgeting and Script Breakdown"

This basic budgeting "how-to" book is a must for *all* Producers of low-budget features. Designed for production people on all levels, ***"The Hollywood Guide to Film Budgeting and Script Breakdown"*** is written by veteran production professional, Dan Chamness. This 224 page book includes:

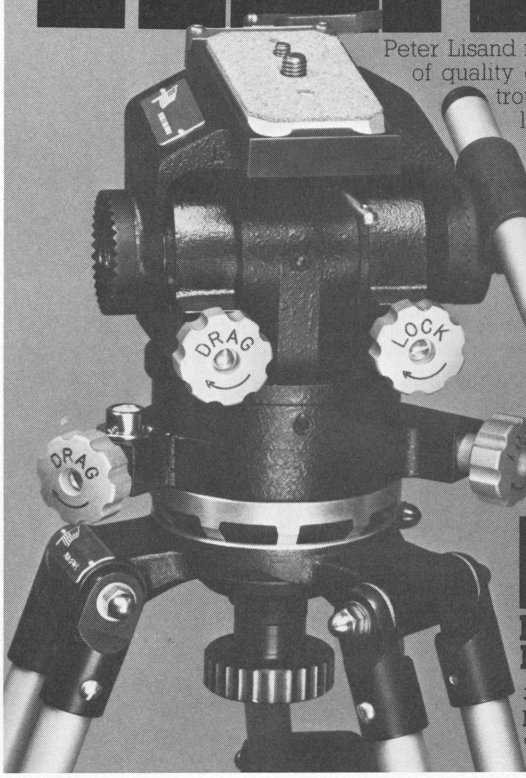
- A Full Shooting Script
- Script Breakdown Method
- Production Board Layout Technique
- Full Foldout Production Board Panels
- Complete Sample Budget
- Pre-production Planning To Save Thousands Of Production Dollars.

Order now—call or write:

30 YEARS 1958-1988

THE STANLEY J. BROOKS COMPANY
1416 Westwood Blvd., Suite 201, Los Angeles, CA 90024 (213)470-2849
Other production books available. Request ***free*** catalogue #1-C.

HEADS



Peter Lisand introduces a completely new line of quality engineered, highly flexible and trouble-free camera heads. We utilize the latest engineering, materials and technology to bring you a simple precision instrument that will provide a worthy companion for our internationally recognized tripods. We invite you to call or write to us for more information or to arrange for an examination of our new and unique camera support systems.

Precision support systems for your precision instruments

Peter Lisand
352 River Road,
Edgewater, N.J. 07020
Telephone 201•943•5600



White Zombie — Today's Unlikely Classic

by Michael Price and George Turner

The word *zombie* was introduced to the American reading public in 1929 in "The Magic Island," a credulous but fascinating book about Haitian Voodoo by William B. Seabrook. Playwright Kenneth Webb brought zombies to the drama in his play, "Zombie," which opened in New York City in February of 1932. In March of that year Webb brought suit against movie producers Edward R. and Victor Hugo Halperin, who had announced their intent to make a movie called *White Zombie* from an original script by Garnett Weston.

Webb, who had been negotiating movie rights to his play, felt (understandably) that his territory was being infringed upon. The defendants demurred, saying the play, having closed after 21 performances, could not have been affected adversely by their plans for a film along admittedly similar lines and that the word *zombie* was in the public domain.

The Halperin brothers won the case and completed their movie for summer release, thereby introducing the zombie to motion pictures. Their film had a boxoffice star, Bela Lugosi, fresh from his successes at Universal in *Dracula* and *Murders in the Rue Morgue*, and the prestige of a United Artists release – quite an honor for an outside producer in those days. United Artists was a company of enormous prestige which was owned by and released the product of a select group of top independent producers, such as Samuel Goldwyn, Douglas Fairbanks and Mary Pickford, Joseph M. Schenck, Howard Hughes, Charles Chaplin, Lewis Milestone and Henry King.

Although the Halperins had been associated with major studios during the silent era, they were on their own in the tough world of the talkies and in the depths of the Great Depression, occupying an office at RKO-Pathe Studio in Culver City. They now found it necessary to operate within the financially strictured parameters of "Poverty Row." No one in the industry would have mentioned the Halperins in the same breath with Goldwyn or Chaplin.

White Zombie was bankrolled by Amusement Securities Corporation, a New York firm specializing in motion picture financing. The capital involved fell far short of the needs of a United Artists sort of project, putting the producers in a caste with the likes of Allied, Invincible-Chesterfield, Majestic, Monogram and Tiffany.

A typical independent operation of the era obtained financing, arranged for deferment of lab costs, rented studio space by the day or week as needed, and avoided retakes. Special effects other than art titles and optical transitions were generally not considered cost viable. Schedules were grueling and budgets were tight, features often being brought in for as little as $8,000 to $10,000 with from four to 10 days of shooting. Two weeks and $75,000 constituted a super-production well beyond the grasp of most Poverty Row impresarios. The working hours for cast and crew were long and the pay was scale or less (the actual compensation often being less than what was reported officially). Film editors crammed six-reel features onto five reels because sound tracks were taxed by the reel – $500 per.

Low budget Westerns for the rural and Saturday matinee audiences dominated the independent output. The non-Western features were designed chiefly as the "exciting co-hits" at the bottom of double-feature programs. Sometimes they were awful, sometimes they helped, and – occasionally – they saved the bill by providing the entertainment an audience failed to find in the bill topper.

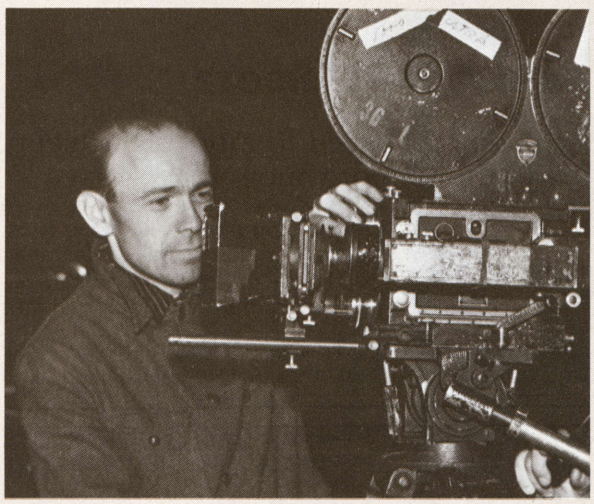
With a rumored $50,000 in hand the Halperins were able to produce their film with amazing speed and economy, yet achieve spectacular production values through proper utilization of settings, photographic technique and special effects. Strong pre-production planning was the key. The cinematography, which is of major studio quality throughout, is by Arthur Martinelli, ASC.

The Halperins – Victor always directed and Edward was the line producer – came to Hollywood from Chicago in the early 1920s as a producing team. Victor, born in 1895 and an alumnus of the University of Wisconsin and the University of Chicago, had been a stage actor and director. Edward, born in 1908, was a Northwestern University graduate. Both men were athletic and poured enormous energy into their work. They produced about 20 silent pictures, some for their company and others for First National, Inspiration-United Artists, Vitagraph and others. Most were romantic melodramas about life in the big city, as typified by the successful *Dance Magic* (1927), with Pauline Starke and Ben Lyon. None of their earlier works bear any thematic resemblance to *White Zombie* except in the persistence of an almost Victorian romanticism.

The brothers were continually theorizing and experimenting to find a scientific approach to movie-making. They made graphs analyzing successful films in an effort to establish foolproof structural formulae. By the time they embarked upon *White Zombie* they had made about 30 pictures. Their analyses of hit pictures brought their attention to the successes scored by a number of horror pictures, notably Universal's *Dracula* and *Frankenstein* and Paramount's *Dr. Jekyll and Mr. Hyde*. Having thoroughly studied the available talking pictures, they reached the accurate conclusion that most contained too much talk and not enough action. They decided to hold dialogue to 15 per cent of the action, limiting it to whatever was necessary to advance the story. Just as a good artist will follow through with a planned design with as little deviation as possible, the Halperins stuck with their decision and came close to achieving their goal, even though it meant pruning pages from the script. The result is a rapid, smooth continuity, a simple and direct rendering of a fairy tale theme:

Along a desolate road in the Haitian mountains, a carriage bearing Neil Parker (John Harron) and Madeline Short (Madge Bellamy) encounters a funeral in which the body is being interred in the roadway. Their driver (Clarence Muse) explains that such practice is widespread in Haiti – it protects the body from theft by ghouls. Further down the road the coach stops again at sight of a man of satanic appearance, later to be identified as a man called Murder (Bela Lugosi). Six human shapes step forth. The coachman cries, "Zombies!" and whips the horses on at breakneck speed as the stranger pulls a scarf from about Madeline's neck.





Photos courtesy of Enzo Martinelli, ASC

Opposite: ***The burial in the roadway, night for night shot on the Universal backlot.*** **Above:** ***Arthur Martinelli at work.*** **Left:** ***Enzo Martinelli as an assistant cameraman.***





Above: ***The Legendre Sugar Mill, where the workers "aren't worried about long hours."*** **Right:** ***Robert Frazer deigns to accept Bela Lugosi's proffered hand as the monstrous Frederick Peters stands by.***

"We might have been killed!" Neil admonishes. "Worse than that, *Monsieur,* we might have been caught!" is the reply. The zombies, the driver explains, were resurrected from death through witchcraft and made to work by night in the fields and mills.

Dr. Bruner (Joseph Cawthorn) has been summoned to the Beaumont mansion to marry Neil and Madeline. Neil, a bank employee in Port au Prince, has summoned his fiancee from America; she met the wealthy Charles Beaumont (Robert Frazer) aboard ship. Beaumont has insisted that the wedding take place on his plantation. Bruner is uneasy about Beaumont's penchant for debauchery, but he cannot voice his suspicions because of the hovering presence of Beaumont's loyal servant, Silver (Brandon Hurst).

Summoned to a coach driven by one of Murder's creatures, Beaumont is taken to a huge sugar mill where numerous zombies labor. One of them stumbles and topples into a cane chopping machine and is ground to bits by his heedless fellows. Beaumont is brought to the office of Murder, who still carries Madeline's scarf. Beaumont has tried to hire Murder to kidnap Madeline, but the zombie master maintains such action will not bring about the desired result. He suggests the only way to win her is to make a zombie of her. Beaumont is horrified, but Murder insists: "There is no other way." He instructs Beaumont to put the merest pinpoint of a potion on a flower or in a glass of wine.

Beaumont pleads with Madeline, but she refuses to reconsider her plans. He gives her a rose. The wedding takes place and a banquet follows. Meantime, Murder appears outside the house and takes a candle from a lamp. This he carves into the shape of a woman and wraps it in Madeline's scarf. As Madeline looks into her wine glass she sees the face of Murder. "I see – I see death," she says, and as Murder melts the effigy in the flame of another lamp, she crumples to the floor. She is pronounced dead by the doctor.

Neil's mind almost snaps. He becomes a drunken derelict, seeing his wife's pale form in every shadow. He stumbles down a road, calling her name, in the black of night. Murder and Beaumont, accompanied by the six zombie bodyguards, disinter the body of Madeline. Neil finds the crypt empty. Later, he and Dr. Bruner set out into the jungle to seek the lair of Murder.

At Murder's clifftop castle, Beaumont realizes his rash action has made of Madeline a mechanical, soulless creature. He pleads with Murder that "She must be gay and happy again," but Murder poisons him with a drug that will slowly turn him into a zombie. The bodyguards throw Silver to his doom in an underground torrent.

Neil and Bruner see the castle; vultures hover and screech. Leaving the feverish Neil below, Bruner goes to reconnoiter the castle. By some mystic reaction to the nearness of her lover, Madeline goes out onto a balcony. Neil is drawn to the castle, where he wanders aimlessly until he collapses at the top of a staircase. Murder sends Madeline with a knife and telepathically orders her to kill Neil, but, because of opposition from Beaumont's waning mind, he must summon all his willpower to make her strike. Her hand is stayed by the interference of Bruner. She runs to a veranda and is about to leap to her death, but Neil recovers and stops her. Murder's zombies crowd Neil to the edge of the cliff. Neil empties his revolver into the creatures, but bullets have no effect. Bruner fells Murder as Neil flings himself to the floor and the zombies shamble mindlessly over the edge. Madeline recovers her mind for a moment, but lapses into a coma when Murder awakes.

Seeking to escape, Murder hurls a gas grenade; the gas, combined with his magic, could make living corpses of his enemies. Beaumont, half paralyzed, appears on the parapet and grapples with Murder. Both men fall to their deaths. Madeline wakes and says, "Neil, I – I dreamed."

White Zombie opened on Broadway at the Rivoli Theatre. No movie ever received a more thorough critical scourge, although the public loved it and it brought in a great deal of money. In recent years it has gained notice as an outstanding film of its time. This belated acknowledgement is hardly as paradoxical as it

seems, for it was the fashion among critics to take a condescending view toward genre films, especially horror pictures, Westerns and gangster yarns. They had been kind to *Dracula*, *Frankenstein* and *Dr. Jekyll and Mr. Hyde* a few months earlier, but once a "fad" was established the honeymoon was over.

White Zombie suffered even more than others of its ilk because of an embarrassingly outmoded, silent-movie style of acting – a fault of Victor Halperin, who nearly a decade later still insisted upon heavy, pantomimic performances from his players. While such a style suited the unreality of the Lugosi character, it was almost fatal to the credibility of some of the other actors. Madge Bellamy was handicapped further by a makeup – including painted Cupid's-bow mouth – that suggests 1926 more than 1932.

Such failings were duly remarked by the press, but critics failed to note *any* of the elements that raise this remarkable film above such handicaps. If the Halperins were unable to adjust to the talkies' new acting techniques, they certainly were ahead of their contemporaries in mastering sound as a dramatic device at a time when many directors were unable to reconcile the possibilities of a mix of sight and sound without sacrificing one to the other. There's a prefiguration of techniques that Orson Welles, Val Lewton and others brought to fruition on the screen much later in this flawed – but perennially fascinating – curio.

Principal photography was completed in two weeks on the stages and backlot of Universal City. The Howard Anderson Company, an independent photographic effects studio in Hollywood, produced glass shots and optical photography. Arthur Martinelli, ASC, was director of photography.

Martinelli was one of the many cinematographers scrambling for work as the Depression threatened the very existence of the movie companies. He was a veteran of the movies, having started as a lab technician at American Biograph in Hoboken, New Jersey, when the industry was in its infancy. Following World War I he spent 16 months in Germany as head of the camera department at First National Studio in Berlin. During the 1920s he had photographed many pictures for the major studios, including a string of slick romantic pictures with Bert Lytell for Metro and First National's "epic drama" of the war, *The Greater Glory*. Like most of the other top cinematographers, Martinelli became "affordable" on the Poverty Row as the Depression ground into its third year.

J. Arthur (Jockey) Feindel (later ASC), a former illustrator and designer from New York, was second cameraman (operator), and Charles Bohny was first assistant. The sole surviving member of the camera crew is Enzo Martinelli, ASC, nephew of Arthur, who was second assistant. Now retired, he remembers the circumstances of that early job well:

"It was just two weeks' work, a short budget picture – after all, we were on Poverty Row. I was lucky to get on the show; I think it was my only picture that year! I really needed that $30 or $40 a week, needed it bad.





Photos courtesy of Ronald V. Borst/Hollywood Movie Posters

Above: *John Harron is surrounded by zombies.* Left: *Lugosi, limned by candlelight.*

"We never went off the Universal lot," Enzo recalled. "Even the night exteriors on the backwoods roads were shot there. All the night shots were night for night. My uncle was always made sure it was possible to recognize the source of the light in those scenes. In so many shows today they just ignore the light source. When working on the indoor sets he always gave them a little scope, a little depth. He kept the actors well *into* the set, not back against the walls. The sets were nicely lit for depth and mood."



The main hall of the castle was assembled, appropriately, from parts of the sets from Dracula. *A glass painting extended the set to cavernous proportions.*

Photo courtesy of Ronald V. Borst/Hollywood Movie Posters

In a picture notable for its sparseness of dialogue, there is one curious scene in which a great deal of explanatory talk is disposed of in one take lasting an actual five minutes. This is where Dr. Bruner tells Neil about voodoo and zombies, incorporating a recital of Article 249 of the Haitian Penal Code: "Also shall be qualified as attempted murder the employment of drugs, hypnosis or any other occult practice which produces lethargic coma, or lifeless sleep, and if the person has been buried it shall be considered murder no matter what result follows." It is somewhat prescient of the method used by Alfred Hitchcock in the 1948 *Rope*, which consisted entirely of eight or nine-minute takes with a constantly mobile camera; endings and subsequent beginnings of reels were bridged by bringing people or objects close to the lens to cause a momentary blackout. Here the opening dialogue is heard over a black screen (Neil's back is close to the lens), then the camera moves to cover the speeches and, as the scene ends, returns to the original position while the closing lines come over the darkness. There is an improvisational quality to this dialogue in contrast to the measured delivery of lines characteristic of the other scenes.

A dominating image of *White Zombie* is that of Lugosi's supposedly hypnotic eyes in extreme closeup. In other scenes in which the actor is exerting his will over others his eyes are emphasized by the lighting. "I learned how that was done on the first day," Enzo Martinelli said. "Arthur just took a cardboard and cut two holes in it about as wide apart as Lugosi's eyes, placed it in front of Lugosi's face and put a light through it. It put two little spots right on his eyeballs when he started to become dangerous.

"Lugosi wasn't really a friendly type," Martinelli recollected. "In those days, of course, most of the stars were a little aloof in order to preserve their mystique. Only a few would fraternize much with the help or be chummy with the guy who fixed the coffee. I thought he looked ill, as though he was in pain. Later, I learned that he *was* ill during the whole production!"

Lugosi played his role in the grand manner – restraint wasn't his forte – and it's exactly what the character demands. Murder is a man who not only possesses extraordinary powers but is completely evil without mitigation. His Satanic qualities are underlined by a makeup consisting of widow's peak, down-turned moustache, forked beard, and hawklike eyebrows. The superb makeups of Lugosi and his zombies were the work of Jack Pierce, borrowed from Universal, for which he had created Boris Karloff's celebrated monster makeup of *Frankenstein* the previous year, and the veteran Carl Axcelle. The rich delivery and timing of his sardonic lines by Lugosi must be heard to be appreciated; they are beyond description.

Scarcity makes dialogue all the more striking. Lugosi has the best lines, delivering them with demonic intensity. He tells Frazer he cannot hope to win the girl: "Not in a month, nor even a year. She *is* deep in love – but not with you." After the girl has been made a zombie, he hears Frazer despairingly tell her that he must take her back. He interrupts with a smirking, "Back to the grave, *Monsieur?*"

When Frazer realizes he is being made into a zombie, Lugosi seems evil incarnate as he explains, "I have taken a fancy to you," then offers a toast: "To the future, *Monsieur.*" Harron, trapped by the zombies at the frantic climax, asks Lugosi who they are. He is told, "For you, my friend, they are the angels of death."

Lugosi said that the producers offered him only $500 for a week's work on the picture. He did the job, he stated, for $800 or $900, and was amazed when the picture proved a huge financial success. According to Dr. Clarence Muse, the composer and actor who

portrayed the coachman, Lugosi rewrote some scenes and even directed some retakes. Muse's scenes are among them; a different actor appears in all but the close-ups and dialogue scenes. The first player was hired because he could drive a team, but it was found that his dialogue delivery was unconvincing. Muse had difficulty trying to drive the coach down a winding mountain road at night but his voice was excellent, so the two performances were intercut.

Beautiful, blonde Madge Bellamy, a star of silent pictures who had been out of pictures for two years while studying stage technique, took the title role with the intention of re-establishing herself in cinema. A unique beauty with eyes that could express things beyond the reach of dialogue, she was excellent in pantomime. Her voice, however, did not register well in some scenes, and it is probable that the picture did her career more harm than good despite its success.

John Harron, a popular leading man of the silents (and brother of the D.W. Griffith star, Robert Harron), also seemed unable to adapt to the talkies successfully. Robert Frazer, however, was ideal for the Byronic role of an unprincipled roue who eventually is perceived as a sympathetic character. Veteran actor Joe Cawthorn, utilizing a comic German accent that he had developed for a vaudeville act years before, provided with skill both the pragmatic occultist necessary to such a show and some equally imperative comedy relief. Muse, Brandon Hurst and Dan Crimmins did well.

The most impressive of the convincingly cadaverous zombies is Chauvin, as played by six-foot-six, 250 pound Frederick Peters, who had been in films since 1916 specializing at portraying Goliath and other giant warriors in Biblical epics. Murder's description of his six bodyguards is worth noting:

"In life they were my enemies. Latour, the witch doctor, once my master. The secrets I tortured out of him. Von Gelder, the swine, swollen with riches; he fought against my spell even to the last... Victor Trisher, Minister of the Interior; Scarpia, the brigand chief; Marquis, captain of the gendarmerie; and this – this is Chauvin, the high executioner, who almost executed *me!*" He has a simple sales pitch for his creatures: "They work faithfully; they're not afraid of long hours."

Much of the credit for the expensive look of the picture is attributable to Ralph Berger, who designed the settings, and to one of the great matte and glass painters, Conrad Tritschler. Berger was an expert at adapting existing sets so that they seem to have been built entirely for the project at hand, an art he utilized often in the making of serials. The gigantic main hall of Murder's castle was created by rearranging the Castle Dracula hall, which was further expanded and disguised for the long shots by glass paintings. The expansive veranda of the castle contains a wide stairway from the *Dracula* set and pillars and properties from *The Hunchback of Notre Dame* and other Universal epics of the past. Tritschler added more castle details, mountains and sky, and Anderson matted in the sea. The





Above: ***Madge Bellamy is sent on an errand of murder while Frazer is helpless to interfere.*** **Left:** ***Zombies, from left, are John T. Printz, Claude Morgan, Frederick Peters, John Fergusson, unidentified, and George Burr McAnnan.***

wine cellar from *Frankenstein* and an old dungeon set, which were being flooded by Universal for their Tom Mix picture, *My Pal, the King,* were utilized – torrent and all – for the cavernous corridors where the characters must walk along narrow pathways to avoid being swept away. The hanging balcony on which Madge Bellamy is seen is from *The Hunchback,* some of the rooms of the Beaumont mansion were made up of walls from the Seward home in *Dracula.* The sugar mill is a dizzying mass of girders, catwalks and huge windlasses. Scenes in which Neil and Bruner look up at the mountaintop castle from the beach are composed of an actual bit of coastline and a glass painting. Some marvelous props, such as the monumental chairs from *The Cat and the Canary,* are artfully deployed.

Martinelli made the most of the settings, many scenes of strong depth being framed through trees and such architectural details as quatrefoils on the Castle Dracula staircase. He placed great hovering shadows in many scenes.

There are a surprising number of optical effects, including the main titles in which the credits appear over the opening scene of the roadway funeral – an unusual touch at that time. A moment later, as the carriage comes toward camera, Lugosi's eyes are superimposed over the scene, at first filling the screen, then growing smaller until they vanish into Lugosi's silhouetted figure. An unusual optical is a diagonally split screen showing the mesmerized girl in the castle



A posed gathering of the principals on the verandah set. On screen the upper castle, mountains, skies and the sea were matted in for larger views.

and her distraught lover, both parts being superimposed over the glass shot of the castle. There is some noticeable shakiness in the compositing of this scene.

The soundtrack makes fine use of long silences punctuated with unexpected noises – the screeching of vultures, the scraping of a coffin being slid into a crypt, the creaking and groaning of the mill, etc. – and occasional bursts of music. Musical arrangements were handled by Abe Meyer, a silent picture maestro who, unable to get a musical directorship with any of the major studios after theater orchestras became obsolete, undertook to supply scores for the independents through his company, Meyer Synchronizing Service. The native drumming and chants were specially composed by Guy Bevier Williams, an expert in ethnic music then employed at Universal. Also commissioned for the film was a Spanish *jota* by Xavier Cugat; this work is properly unnerving in sequences where Harron pursues the vision of his lost bride. An unusually weird effect is produced by the tragic spiritual, "Listen to the Lamb," as hummed by alternating male and female choruses. Some of the other action is scored by appropriate agitatos from Meyer's silent film music library.

Amusement Securities Corporation retrieved the distribution rights to the picture and kept it in reissue for many years – which led to an interesting sequel. In 1936 the Halperins, then proprietors of a small producing company called Academy Pictures at Tec-Art Studios (now Raleigh Studio), produced *Revolt of the Zombies*, an unsuccessful attempt to repeat their 1932 success. Although the theme, subject matter, locale and other particulars differed widely from the first picture, Amusement Securities brought an injunction suit against Academy for "Unfair Competition By Use of Name 'Zombie' in Title." The producers were enjoined from using the word in a title and from using any advertising or materials tending to identify the picture with *White Zombie*. Damages and an accounting of profits also were ordered. The court, after a 14-day trial, decided that the word had acquired a secondary meaning suggestive of the earlier picture and that the title *Revolt of the Zombies* constituted unfair competition. The Halperins, therefore, had to retitle their picture *Revolt of the Demons*, although sanity prevailed eventually and they were able to again use the word they had made famous.

Wild, different and sometimes overdone, *White Zombie* has earned a loyal following and at least as many detractors. It creates and sustains a Gothic mood as few other pictures have, provides some diabolical chills (the sight of a bullet thudding into the bare chest of the giant Chauvin without halting his advance or drawing blood is as frightening a moment as any film can offer), gave the underrated Lugosi his finest role, and remains one of the most haunting and interesting films of its time.

White Zombie

Released by United Artists

A Halperin *production; produced by* Edward Halperin; *directed by* Victor Halperin; *story and dialogue by* Garnett Weston; *director of photography,* Arthur Martinelli, ASC; *assistant director,* William Cody; *editor,* Harold MacLernon; RCA Photophone *recording by* Clarco; *sound engineer,* L.E. (Pete) Clark; *settings by* Ralph Berger; *art effects,* Conrad Tritschler; *special effects by* Howard Anderson; *makeup artists,* Jack P. Pierce, Carl Axcelle; *second assistant director,* Herbert Glazer; *dialogue director,* Herbert Farjeon; *assistant to producer,* Sidney Marcus; *musical director,* Abe Meyer; *original music,* Guy Bevier Williams, Xavier Cugat; *additional music,* Nathaniel Dett, Gaston Borch, Hugo Riesenfeld, Leo Kempenski, Hen Herkan, H. Maurice Jacquet; *operative cameraman,* J. Arthur Feindel; *assistant cameramen,* Charles Bohny, Enzo Martinelli; *photographed at* Universal Studio; *running time, 69 minutes; released July 28, 1932.*

Murder, Bela Lugosi; *Madeline Short,* Madge Bellamy; *Dr. Bruner,* Joseph Cawthorn; *Neil Parker,* John Harron; *Charles Beaumont,* Robert Frazer; *Driver,* Clarence Muse; *Silver,* Brandon Hurst; *Pierre,* Dan Crimmins; *Chauvin,* Frederick Peters; *Von Gelder,* George Burr McAnnan; *Latour,* John Printz; *Zombies,* Claude Morgan, John Fergusson; *Maids,* Annette Stone, Velma Gresham.

WE'LL BLOW UP YOUR MOTHER.

And everyone else in your film. We specialize in Super 16 and 16mm enlargement. Also Main & End titles, optical effects and problem solving.

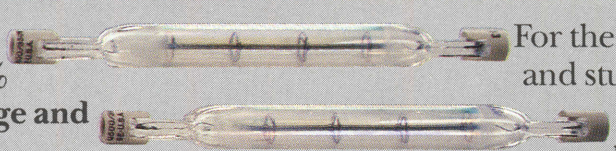
We're located in San Francisco at 1000 Brannan Street, 94103. Just phone us at (415) 626-1100. The quality of our work will blow your mind.

INTERFORMAT
THE BLOW UP SPECIALISTS.

GE IS THE LIGHT THAT TAKES THE HEAT OFF THE PERFORMERS



GE Lighting lights up the night while generating 35% less heat than ordinary stage and studio lights.



The pace is frantic. Five minutes to airtime. Late breaking news has just been handed in. As the countdown begins…the lights go on.

For the performers, ordinary stag and studio lights can be torturou because they generate so much heat. That's why GE invented the GE Watt-Miser Quartzline® lamp.

This Quartzline lamp, with a revolutionary infrared reflecting coating, delivers 90% of the



light of ordinary stage and studio lights while using up to 35% less wattage. It generates less heat, which means more comfortable working conditions for the people onstage and the people backstage. It also reduces the load on the air conditioning system and fits existing fixtures.

With features like these, it's not surprising that more and more people are using them. Because when what's onstage is hot, GE Lighting keeps it cool.

GE is Light.

GE Lighting



Produced and directed by Burt Kennedy
Photographed by Ken Lamkin, ASC

by George Turner

Logic, according to some of the "wise guys," seldom applies to the making of movies. Sometimes the facts seem to indicate the truth of such a statement. On the other hand, it would be impossible to produce a two-hour TV movie with a large cast and a lot of mass action at several locations in three states in a total of 18 days plus one day of second unit photography without appyling a great deal of logic. Veteran writer-director Burt Kennedy, who was in charge of the CBS-TV special, *Once Upon a Texas Train*, is definitely a man of logic, attested by a string of successful projects spanning more than three decades.

Logic certainly dictated Kennedy's choice of a cinematographer for his Western comedy-drama. Ken Lamkin, ASC, suits this kind of show the way John Wayne and Gary Cooper did – like a work glove. A tall Texan with an easy-going manner, at home in the saddle as well as on a Titan crane, the one time rodeo rider would rather photograph a Western than be a kid again at Christmas. Not incidentally, he is an Emmy winner who has been nominated for the award nine times in four different categories.

"I had done the second unit filming on *Thirteen Days to Glory: the Alamo* for Burt Kennedy and now he wanted me for *Once Upon a Texas Train*," Lamkin recalled. "He had been working on it for quite awhile. He wrote it and just about had it sold when the movie called *Tough Guys*, with Burt Lancaster and Kirk Douglas, came out. The story lines were somewhat similar to his movie and CBS backed off. Eventually, they went ahead with the project, however. The Bob Papazian Company produced it; I had worked with him many years ago.

"Burt called me to shoot it and I was delighted because, of all the directors I've worked with, he is my all-time favorite. A first class guy. He is a rare individual who seldom looks in the camera. He will show you the scene, say 'Here's what I want,' and he puts his trust in the cinematographer, giving you a feeling of responsibility and im-

portance. Sometimes, if I have to question him, he'll look in the camera and either say 'I love it!' or 'I hate it!' If he hates it, we discuss what he hates about it and we fix it. Then he looks again and says, 'I love it!'

There was very little time for preparation. "We had about nine days to get it together and start shooting," Lamkin said. "We went looking for locations, although Burt pretty well knew where he wanted to shoot anyway. We did it in California at the Big Sky Ranch out in Simi Valley and the Line Ranch in Thousand Oaks, in Arizona at Old Tucson and Mescal, right outside of Tucson, and in Nevada near Ely. We had an 18-day shooting schedule and a big cast including Willie Nelson, Richard Widmark, Ken Curtis, Chuck Connors, Jack Elam, Gene Evans, Royal Dano, Dub Taylor, Stuart Whitman – all the old cowboys – plus Angie Dickinson.

"One other thing: the stunt coordinator was Casey Tibbs, World Champion Cowboy for a lot of years."

The story is about a gang of train robbers headed by Willie Nelson who are captured by a band of Texas Rangers headed by Richard Widmark. Twenty years later, Nelson gets out of prison and immediately robs a bank in order to raise enough money to get his old gang together as well as make the Rangers angry enough to chase him so he can rob the same train again. Unfortunately, after 20 years none of his men can ride well, they have bad eyesight and have to wear glasses, and they can't shoot straight any more. Some of them no longer own horses. Elam has to ride a bicycle, Whitman rides a mule and Taylor has a battered wagon. Widmark and his Ranger crew are in the same condition – they can't see, can't ride and couldn't shoot the side of a barn. There is a great deal of comedy as the geriatric gangsters stumble around the desert trying to rob the train, while being pursued by an equally stiff-jointed posse.

The horse-opera hasn't been made in which there were no mishaps. Lamkin reported one:

"A sad thing happened on the last day of the shoot. Jack Elam insisted on doing some of his own bicycling, even though his stunt double did most of it. He said, 'Let me ride the thing.' But he took a bad fall and was seriously hurt, breaking his knee cap and his thumb. He still did three scenes in spite of his injuries: one as he fell off his bike, one scene around the campfire and another when he was listening for Indians down by the railroad track. He's a real trouper! Burt played these scenes on the ground. Jack came back and they took him out of the ambulance, put him on the ground, and he did two of his scenes lying down. The last scene he did in the show was around the campfire. We propped him up against a tree, covered his cast up with a blanket, and he played the scene with Richard Widmark. He was hurt badly, but I understand he has now had surgery and is doing all right."

Working on location is much to Lamkin's liking. "Sometimes you wish for the quiet of a studio," he admitted. "We were bothered a lot by planes flying over, but there is hardly anyplace left to shoot where you don't have to deal with planes and helicopters, except maybe in parts of Utah. Surprisingly, there are still a lot of locations not too far from Los Angeles without telephone poles and other signs of modern life.

"Everything was done on practical sets. Nothing was shot in the studio – not even any of the interiors. We did one ballroom scene in downtown Los Angeles, but except for that everything Western was legitimately Western. We were really lucky with the weather – clear, blue skies and great clouds."

About 80 per cent of the picture was covered by two cameras, Lamkin said. "We used an Arriflex BL IV and a BL III. We had an Arri III for high speed work and fight scenes, a Fisher dolly, and for several days we had a Chapman Titan Crane. We worked with a 10-100mm Cooke lens, a 25-250 Cooke, and a set of Zeiss high speed primes for night work and interiors.

"We used arcs and nine lights on all exteriors. We limited the use of HMIs, but we did keep with us four HMI 1200 PARs. They have interchangeable lenses for

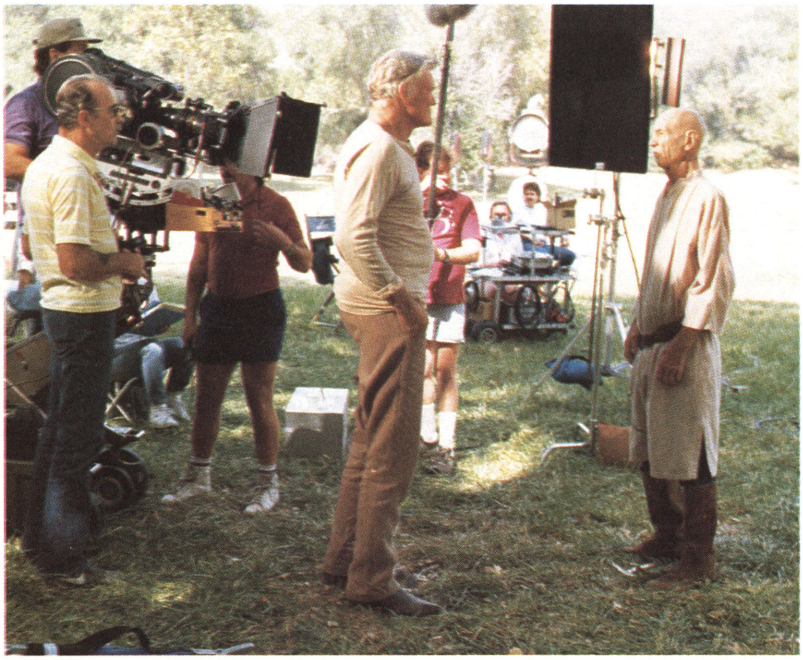




Photo by Dave Tilford

Left: ***(Frame enlargement) Cassidy, villain of the piece, learns the Rangers are at the old hotel and a gunfight is sure to ensue.*** **Below (Left to right):** ***Kennedy, Ken Lamkin on camera. In front of train Alan Gordon, prop man playing part of conductor, Red McKenny, Nelson's double, and on the train the bandits, members of the Ely Nevada Sheriff's Department.***

Top: *Lamkin, Chuck Connors and Hank Worden prepare for outdoor scene.* Below: *Camera crew at work on flashback which features ballroom scene.*





Photos by Ron Nance

spot flood and they are really great. We supplemented a lot of our moonlight backgrounds that were things we couldn't reach – we used lot of those – with the HMIs. Most of our weather was really good, with quite a lot of sun. Arcs seemed to be the answer to that. I like arcs, have been an arc man for a long time.

"The rest of our package was incandescent. We tried building a long snoot on the little 750 soft lights – they call them egg crates – that extend off the light about two or three inches. We built one that ran out about two feet and we used that as our key light on a lot of the night scenes and it would give us a very, very soft light. It worked out really well. For a scene with Angie Dickinson and Richard Widmark when she arrives on the train, we used that as our key for the close-ups and it worked well."

For most of the picture Lamkin elected to use what he termed "simple lighting – nothing out of the ordinary. We tried to shoot the exteriors all in backlight, so we had to use a lot of fill with our shiny boards from 'way back, so it didn't look like shiny boards." Large "silks" made of Grifflon were used to diffuse the sunlight in many scenes. "We used a lot of Grifflon. For big scenes and many horsemen we used two or three 12-by-12 foot Grifflons to fill in an area. They do a nice job. We used them also on a cabin and a couple of relay stations."

Much of the picture was photographed with the new Agfa negatives because of Lamkin's admiration for the location photography of *Out of Africa* and *The Mission*, both of which were shot largely on Agfa stocks.

"I didn't have a chance to do any lighting tests or night tests," he noted. "I did do some exterior shooting with Agfa and liked what I saw. The first night we got into a scene, I was rating the film at a suggested 320. The picture came out dark. The background did not hold up to the faces, did not seem to have a proper ratio. With 5394 (Eastman's high speed film) you can tell with your eye what you are going to get on the film. You know you are going to get a nice balance and the background will hold up. But in dailies, the Agfa didn't hold up, the background fell off.

"I was alarmed," Lamkin continued. "I went to the lab and had the Agfa man come down. He told me to rate it about 250. I was still a little scared because I didn't like the look I was getting. It was an important picture for me and the producer said all was too dark in the first night scene. On the second night I used Agfa again and rated it, not at the suggested 250, but at 200 – and it came out okay. But inasmuch as I could use 94 and rate it at 320 or faster and get the same look, I decided to go back to 94 for all the night stuff. It worked out fine."

He decided to stay with Agfa ASA125 for all the day exteriors and use high speed Agfa (320) for day interiors where they could utilize the HMI package and some daylight. "It seemed to hold up where we were doing bright stuff, but wouldn't handle the blackness." He was highly pleased with the results of the exteriors. "With

the Agfa 125, it is very hard to overexpose. It really holds the contrasts and shades of dark. This was our rather unusual film system."

On day time scenes, exteriors and interiors, Lamkin used a quarter coral filter on everything "to give it a little more warmth. It just seemed that the picture called for it and I was happy with the way it looked.

"I didn't use any filters except on Angie Dickinson, and that wasn't much because she looks like a million bucks," Lamkin enthused. We used some black nets on the train scene where she meets Widmark, just to soften up a bit. It was a love scene, romantic; it needed some softening. On a flashback dance sequence I used some number one double fog. Also on the interiors of the bars in Old Tucson, I did use an eighth double fog to soften it just a bit and add to the candlelight effect."

Much of the picture consisted of night for night photography. Lamkin said he was "a little concerned about a scene where the old timers get together and they are ambushed by a group of young hoodlums led by Sean Cassidy. They kidnap Willie and the gang at night and take them to a ghost town where there is no electricity, no candles, or any other practical lighting. We had them riding across the desert in the middle of the night and the question arises, 'where is the light source?' So we put up a great big arc and we put a blue gel on it and then pretend that it is moonlight. For television that seems to be acceptable. I don't like it, but..."

Another worry for the cinematographer was that, according to the script, the interior of the bar where Nelson is held prisoner by Cassidy is lighted by a single candle. "I told Burt (Kennedy) that one candle isn't sufficient as a light source," Lamkin said, "so he told me to use kerosene lanterns or more candles or whatever was needed. Then we put some more candles in the bar. When the Texas Rangers swarm in on the group and find the kids inside Cassidy was supposed to put out the – supposedly – one candle, and that puts the saloon into darkness again. There are 11 guys in the bar, all with guns, and no light, except for a little moonlight.







Frame enlargements depict Widmark and Dickinson in conversation about the old gang which gets together for a new go at crime.

"Burt, however, said it doesn't matter that the script says he blows out one candle – it would be permissible to have the others still burning and give us some light. Therefore, we left a few burning here and there and in the corners so we would have a little bit more light in addition to the blue from the outside. We used arcs with blue gels outside to come through the window and we had some blue bounce inside. We kept it at a low level. After we put in the candles we could use a little cross lighting and some rims with incandescent light. We used CTO – a quarter CTO most of the time – in order to warm everything up, because we did have a fire in the fireplace."

These scenes required the use of high speed primes, mostly at f:1.8. "We kept the keys low so the candles would jump and appear to



Showdown time as the Rangers and the robbery gang walk towards each other in traditional Western movie style.



be the source," Lamkin noted. "We were working on 8 to 12 footcandles most of the time. We couldn't have done that a few years ago."

Both cameras were used to cover most of the exterior scenes, particularly those involving riding or shooting. Long lenses were favored. "I like the long lens shots on a Western, and I tried to as much as I could with the 25 to 250mm on the stagecoach ride-ups, wagons in the distance and groups of horsemen," Lamkin said.

"We used the Chapman Titan for the opening of the show where we introduce all our old timers riding across the desert, supposedly in Texas, but really Thousand Oaks. Speaking of script location, we were trying to figure out how to get our tracking shots out in the boonies with Dub Taylor driving a wagon, Willie Nelson riding the wagon and four members of the gang following the wagon. Do we lay track, or do we grade the road, or what? Actually, we did neither. We found a paved road that was inside the ranch just before the wilderness, alongside which there is a mountainous background. We used that same background over and over. We'd do one guy riding by and shoot him. Back up to the start and we'd do the same thing, over and over."

A set built for *The Three Amigos* was converted into the exterior of the prison from which Nelson is released at the opening. The oft-used vintage train at Old Tucson also figures in several scenes. It is shown in motion although it does not run.

"They would roll it back up the track about 100 feet, using a tractor," Lamkin revealed. "Then they'd get it rolling and we would shoot that. We did it three times to get it the way we wanted it. "To show Willie robbing the train we went to Ely, Nevada. There is an old

train there with about 15 miles of track – the Nevada Northern Railway. It was built in the late 1800s but it's still in running condition. It's operated and kept up by the White Pine Historical Railroad Foundation. The territory was just great for it because it looked a lot like West Texas."

There was one difficulty with Ely: the town is so small that it was impossible to recruit enough extras from the local population to stage the train robbery. This was a day of second unit work, with none of the regular cast available. Kennedy solved the problem by hiring off-duty personnel from the county sheriff's department.

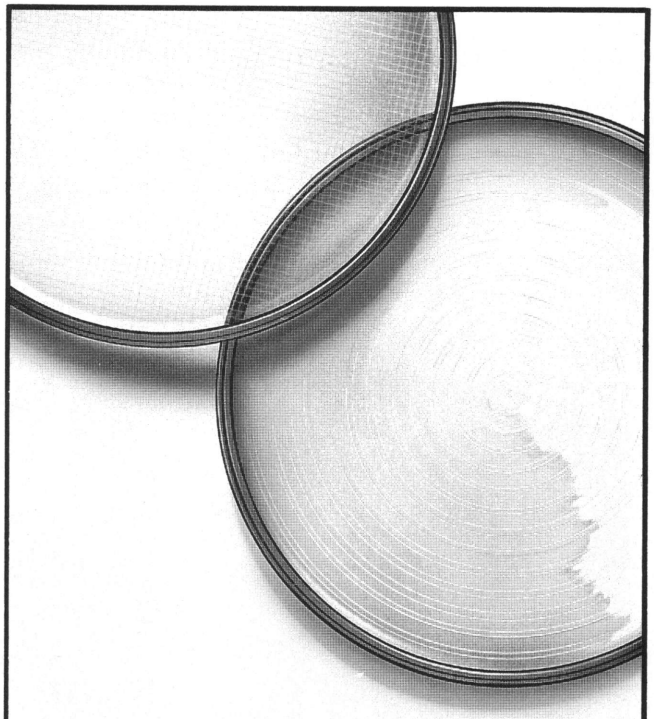
"They were great," according to Lamkin. "They all knew how to ride and how to handle guns and they knew not to aim them at anybody. Ordinarily a prop man has to load all the guns, but in this case he'd just hand them a box of shells and they'd load their own. Incidentally, our prop man got into the act and played the conductor in the robbery sequence.

"We did the ghost town and saloon gunfight – in which nobody gets killed! – at a little town about 50 miles south of Tucson, called Mescal. Altogether, about 70 per cent of the picture was exterior, which I liked. We tried to get as much vista in it as possible."

There were few retakes and very little wasted film. Lamkin feels that the film editor, Warner Leighton, did a remarkable job of preserving a tight, fast moving continuity. "I worked with Art Tostado at Consolidated Film Industries on the final timing and they did excellent work," Lamkin said.

He was less enthusiastic about the film to tape transfer, however, particularly regarding the loss of blacks in interior scenes. "We all know what can happen to our work in the transfer process," he lamented.

Ken Lamkin is one of the many film craftsmen who would like to see Western movies make a comeback. "I was brought up on Westerns and I think it is ridiculous to pay me that kind of money to go out and play cowboys and Indians. It was wonderful!" △



STARBURST - The advantage is clear to see!

Further advancement in our filter technology has enabled us to create a new range of glass starburst filters:

1) Starburst (Selective)

2) Starburst (Clear)

3) Starburst (Diffusion)

1. The **Selective** starburst allows you to pinpoint a single star, without picking up any other highlights.

2. The **Clear** starburst enables you to create stars without any loss of sharpness to the scene.

3. The **Diffusion** starburst allows you to achieve the star effect while adding a very subtle softening effect.

These particular **Starburst** filters are specially designed to ensure that no pick-up of grid spacing should occur when using wide angle lenses and are available in 2pt, 4pt, 6pt, 8pt, 16pt.

Lee Diffusion Filters

These new filters can be bought individually or in sets of five. They allow very precise control of the softness of the scene. Constructed in the concentric circle format, they must be placed exactly in the centre line of the lens for the best results.

All Starbust and Diffusion filters are supplied mounted in all the regular sizes unless otherwise specified.

LEE FILTERS

ADVANCING ART THROUGH ADVANCING SCIENCE

East Coast Distributor: Belden Communications Incorporated
534 West 25th Street, New York, NY10001
Tel: (212) 691 1910. Telex: 423571. Fax: (212) 695 0196

West Coast Distributor: Cine Mills Corporation
3500 West Magnolia Avenue, Burbank, California 91505
Tel: (818) 843 4560. 1-800-324 7674, 1-800-692 6700. Telex: 9104982768
Fax: (818) 843 7834

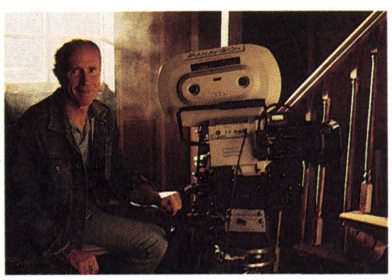
Lee Filters Limited, Central Way, Walworth Industrial Estate
Andover, Hampshire. SP10 5AN England.
Tel: (44) 264 66245. Telex: 477259. Fax: (44) 264 55058

Reflections 1: Cronenweth

by Nora Lee and Benjamin Bergery



Nota Bene: This article introduces a new series based on lighting seminars ("Aesthetics of Cinematography") held recently at the University of Southern California. The seminars were originally organized by two students, Kate Hall and David Hartwell. Benjamin Bergery of Panavision was coordinator and Hartwell was instructor, and the seminars were supported by Eastman Kodak, Panavision, Technicolor, and Mole-Richardson. For each seminar, a cinematographer recreated a scene from one of his recent films, with the students acting as cast and crew. Cinematographers discussing their particular approaches to lighting problems in upcoming issues will include Stephen Poster, ASC, James Crabe, ASC, Allen Daviau, ASC, John Hora, ASC, and others.



Jordan Cronenweth, ASC, has gathered a long list of accolades for his cinematography, including the first ASC award for excellence for his work in Francis Ford Coppola's *Peggy Sue Got Married.* Cronenweth chose to build his lighting seminar around his favorite scene from that film. In the middle of the night, Peggy has come down to the basement of her house for a smoke; her boyfriend-cum-husband has joined her there and they are deeply involved in discussion. Together they move in and out of the shadows, lit only by the moonlight from a single small window.

"I chose that scene because it is a graphic representation of what can be done with one light," said Cronenweth in an interview after the seminar. "The choice to use one light was the result of the location. There was only one window in the basement and if I had brought the light inside, I would have had to use a bunch of little tiny units and hide them somewhere. It would have been spotty and I wanted to have one source. I always like to have a source. The window was the answer. At least it was worth a test."

The most intriguing aspect of this simple lighting set-up is that the actors provide the fill light for the scene. As they move into and out of the key, the light is reflected off their clothing and their faces, filling in the shadows in a very subtle way.

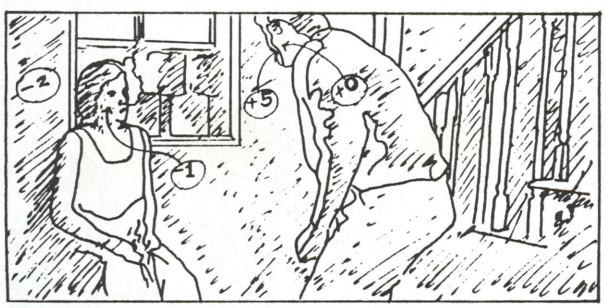
Other elements that affect the image that appears on the film are lenses, camera and filmstock, along with camera angles. Cronenweth explained that these choices (a Panavision 35mm Primo lens, the Panavision Platinum, and Eastman 5247 in this case) are often the result of experience. "You are always working under changing conditions. Every location has its own set of problems. As you learn your craft you find more and more solutions to problems – solutions that allow you to work with the style that you have chosen. What you have to take into consideration when you choose the lens and other things, is 'What do I have to do to this room to give it *my* look or *the* look?'"

In one part of the seminar footage, the camera begins tightly on the torsos of the two actors. The girl moves back under the window and slides down to a bench. Using this scene as an example, Cronenweth described his choice of lens.









Technical Data

Lens: Panavision Primo 35mm.
Iris Setting: T 2.1
Camera: Panavision Platinum
Format: 1:85:1
Film: Kodak 5247
Film Rating: 125 ASA, process normal
Lights: 1 Mole Richardson 10k (Tungsten)
Other: Smoke machine was used
Sound Stage: Cinema/Television School, USC
Processing and Workprint: Technicolor Lab
Timing Lights: Yellow = 24, Cyan = 50, Magenta = 48

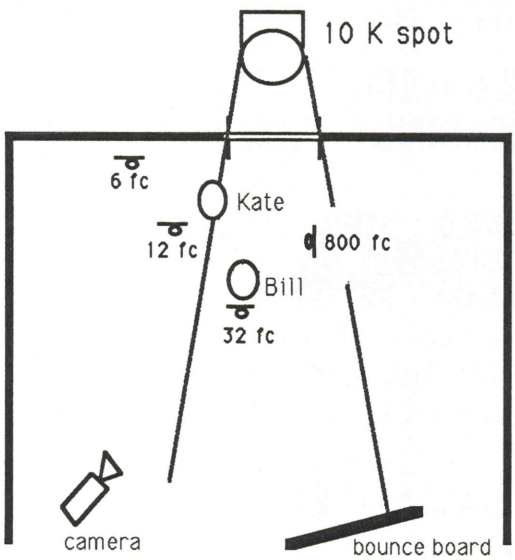


Photos by Jasper Johall

Light Values

(with reflected light meter) *Zone System*	(with incident light meter)
Left-hand wall: –2 stops	**Left-hand wall:** 6 foot candles *(3 stops under key)*
Kate's face: –1 stop	**Kate's face:** 12 foot candles *(2 stops under)*
Bill in light: +5 stops	**Bill in light:** 800 foot candles *(4 stops over)*
Bill in shade: +0 stops	**Bill in shade:** 32 foot candles *(1/2 stop under)*

Note: Kate's face increases in value as it receives reflected light from Bill's yellow sweater.



Far left: ***Enlargements from timed work print frames in sequence.*** **Below:** ***Overhead shot of lighting set-up.*** **Opposite page:** ***Actors Kate Hall and Bill Brady re-enact scene from*** **Peggy Sue Got Married. Below:** ***Jordan Cronenweth, ASC.***

ALL UNDER ONE ROOF

CHAPMAN TITAN, MERCURY, ZEUS, NIKE & OLYMPIAN CRANES

CHAPMAN HYBRID, HUSTLER & PEE-WEE DOLLIES

ARRI CAMERAS, BL-4, ARRI-3, II-C

COMPLETE CAMERA REPAIR-MAINTENANCE VIDEO LENS REPAIR

3-TULIP CRANES CAM-REMOTE & SKY-MOTE

TYLER HELICOPTER MOUNTS

VIDEO PROMPTING SYSTEMS

NAGRA AUDIO RECORDERS

PS-A

PRODUCTION SERVICES - ATLANTA

Equipment Rentals, Sales & Service

(404) 622-1311

2000 LAKEWOOD WAY, BLDG. 4
ATLANTA, GEORGIA 30315

"Specifically, we wanted a lens that would give us a really close shot on her in the beginning. Then as she goes back to the window and slumps down the wall, we wanted it to become a two shot. You could do that with a dolly or a lens change and a dolly. I personally don't care to take her to the window and have the camera pulling back. She winds up going one way and the camera goes the other. This way, she goes to the window and the shot grows by virtue of the focal length to accept the two shot. That was the criterion we used to choose that lens. Let's face it, though, a lot of photography is simply by feel."

As for his filmstock, he said, "I've tested the 5247 every way it's possible to test it. I am comfortable with the consistency of the product. I'm still in the process of testing 5294. I think you can get by most times with 5247, and 94 is nice to use for night scenes – exteriors with available-light backgrounds. I think 47 has a little better look to it. The shadows in 5294 tend to take on color. The shadow area in 5247 is beautiful." Those beautiful shadows were extremely important to this high-contrast scene.

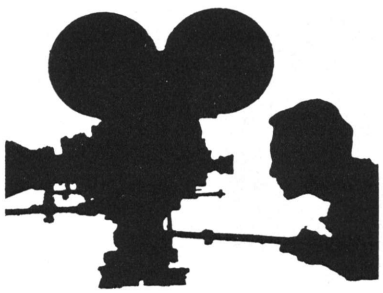
To measure the light in this unusual set-up, Cronenweth used both an incident light meter and a spot meter. He arrived at his stop with information from both. In this case, though, he was particularly interested in the readings from the shadows. "How much are you going to see in the shadow area? So I read that area and compute my stop, taking into consideration the highlights, but concentrating primarily on the shadow area."

One of the most important steps in getting the right image on the screen involves the relationship between the cinematographer and the laboratory. As Cronenweth told it, "It's like being married. I get involved with the lab when I start testing, if I'm going to start testing. We discuss things like: 'Why is it so red when it's supposed to be blue? Why is it so blue when it's supposed to be red? Why is it so dark? Why is it so light? What are you doing to me? You're killing me!'"

Out of this friendly discussion comes enough information to set printing lights for the dailies. Every cinematographer has his or her own method of arriving at the printing lights. Cronenweth uses the process of elimination. "I shoot a series of exposure tests and have them printed and timed so they all look the same. You can see whether your lights are too high or too low and you move them to either underexpose or overexpose for the next test. Then you have a pretty good idea what your lights are. But there is nothing like actual shooting. On the first day's dailies you try the lights that you tested. If they work, fine; if they don't work, you time the day's work and go to the next day. You try a one-light the next day and sometimes it takes several days to get in the groove. There are so many variables that affect the way film looks. I'm glad there are – because if it were easy anybody could do it."

Directors of photography do not begin pictures with a clean slate. They take with them a multitude of influences on their art and craft. Cronenweth explained, "I see tons of movies and I steal every good idea that I can. I shouldn't say steal – I should say borrow." For example, Cronenweth finds that great paintings can inspire him on some pictures, but not others. Television can be another source of ideas: "I find there is some really good work on TV. It's amazing because those cinematographers have so little time."

In a final note on his choice of material for the seminar, Cronenweth concluded, "The thing is, a lot of new camera people make the same mistake – they overlight. Lighting can be simple. You can do it as simply as that was done and have a very effective result." △



Things To Come...

They didn't know they'd done it. They didn't even have a movie camera or a star, or a story, but they made a movie anyhow. The year was 1879 and it really was the very first motion picture! Read all about it in the March issue of *American Cinematographer*. The locale was Leland Stanford's trotter farm near Menlo Park, California. The record of those trotting horses launched the history of the movies.

There Are No Missing Pieces

When You Rent From Cine Video



We Focus on Dependability, So You Can Focus on Other Things

Renting the equipment you need—all complete and ready to roll—does not have to be a major production.

At Cine Video, our service department brings every order into sharp detail. They're knowlegeable, helpful and prompt.

And our equipment is second to none: State-of-the-art 35MM and 16MM cameras. Video cameras. HMI and tungsten lighting. Grip equipment. Trucks. Stages.

Everything at excellent rates.

So for your next movie, commercial or music video, rely on Cine Video. Wide-angle choice of equipment... Close-up attention to detail...

The best rental source from any point of view.

CINE VIDEO
MOTION PICTURE EQUIPMENT CORPORATION

EQUIPMENT RENTALS AND SALES • STAGE RENTALS

948 N. Cahuenga Blvd. • Hollywood, CA 90038 • (213) 464-6200



Photos by Phil Hersee and Virgil Mirano

Outer Space Visited by *Earth Star Voyager*

Television mini-series produced by Martin Starger for Disney
Directed by James Goldstone
Photographed by Robert Stevens
Special visual effects by Richard Edlund, ASC

by Robert S. Birchard

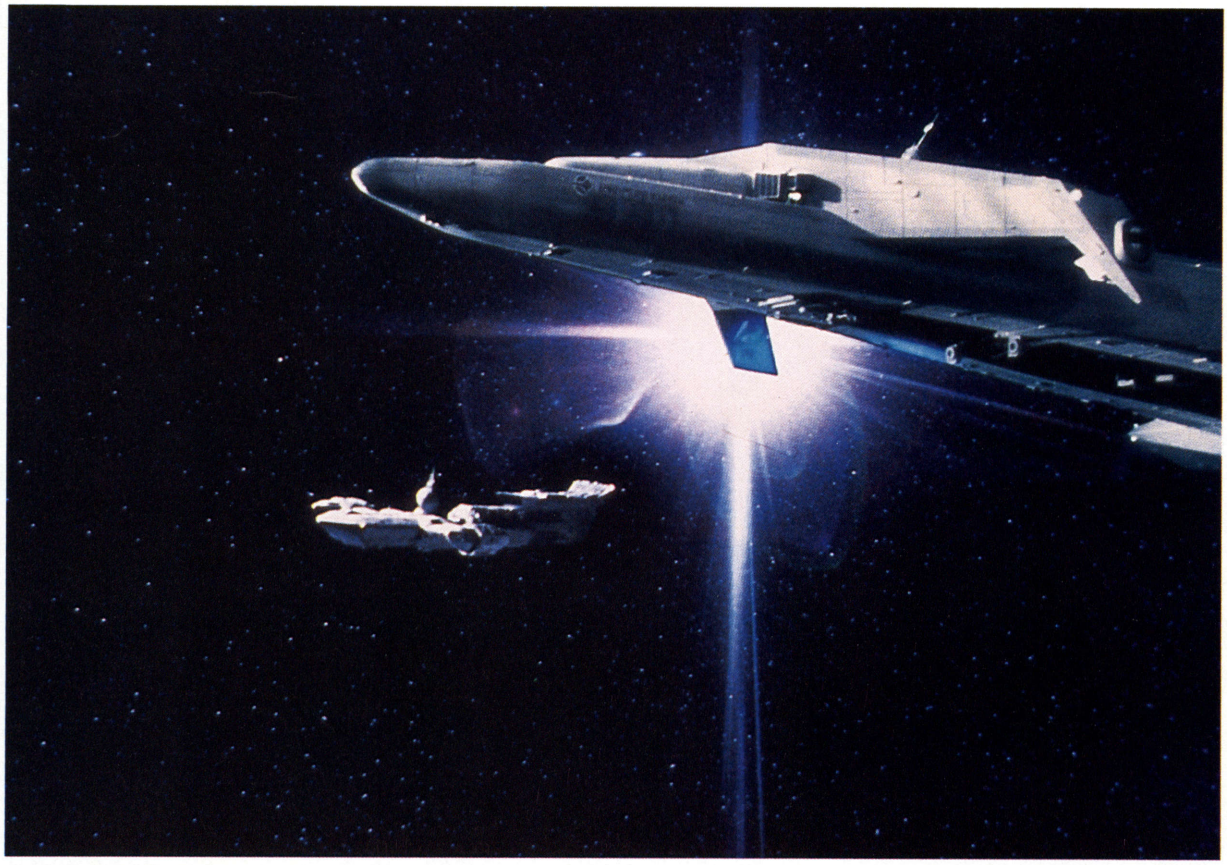
A mere 86 years after 2001 – a century from today – *Earth*Star Voyager* is set to blast off on a mission to find the uncharted planet of Demetur. The expedition is of some urgency – in fact (in case you hadn't guessed) the very survival of mankind hangs in the balance.

The Disney Sunday Movie on ABC Television provides the showcase for the *Earth*Star Voyager* expedition. According to the studio, the four-hour, two-part mini series is the "most lavishly budgeted" film ever produced for Disney Television (quite probably) and also Disney's "first entry into the mini-series format" (though some might say that honor rightfully belongs to *Davy Crockett*).

Directed by James Goldstone, and photographed by Robert Stevens (fresh from outings with *Amazing Stories* and *Max Headroom*) *Earth*Star Voyager* is an exploration of a near future in which the Earth is rapidly becoming uninhabitable due to overcrowding and the effects of pollution. Speculative fiction, yes, but it has the element of truth that is a part of all good sci-fi, and every effort was taken to make the filmic voyage as spectacular and believable as possible.

Ironically, James Goldstone, who also directed the original pilot for *Star Trek*, does not consider himself a science fiction devotee, so in approaching the script he sought to explore and develop the human aspects of the story. He also made few concessions to the small screen in bringing *Earth*Star Voyager* to life.

"I move back and forth between features and television, and I'm not interested in changing my style in doing TV as opposed to doing a feature. Film is film. When I see a picture in dailies, or in the



Opposite page: *Bridge of the Voyager.* Left: *Composite of the space ship by Boss Film, Inc.* Below: *Henry King 'in the shell.'*

various cuts, or in dubbing, I see it on the big screen."

Given his "film is film" approach, Goldstone was interested in using the photographic style to enhance atmosphere and mood. He selected Robert Stevens to shoot the mini-series in part because the cinematographer had worked as a camera operator on several of the director's previous efforts, and because he liked what he saw of Stevens's work on *Amazing Stories* and *Max Headroom*. "The boldness with which he lights suited this project," says Goldstone.

One of the things that appealed to Stevens about the project was that it was not just another space opera.

"I was pleased that it was not going to be an "effects" type movie. We had the models and effects shots to supplement and give context, but there are only about forty effects shots in the entire four hours. Basically it is a fairly realistic and human scale story."

Adding to the challenge was the fact that Stevens would be shooting in Vancouver, Canada – not in a well-equipped studio, but in several of the vacated pavilions of the recent Vancouver Expo. The company did utilize some exteriors at the Expo, but generally the needed sets were built inside the pavilions, which proved to be serviceable but far from ideal stages.



"They were all temporary metal buildings," says Stevens, "and when the temperature would change you'd hear these big bangs as the metal expanded and contracted."

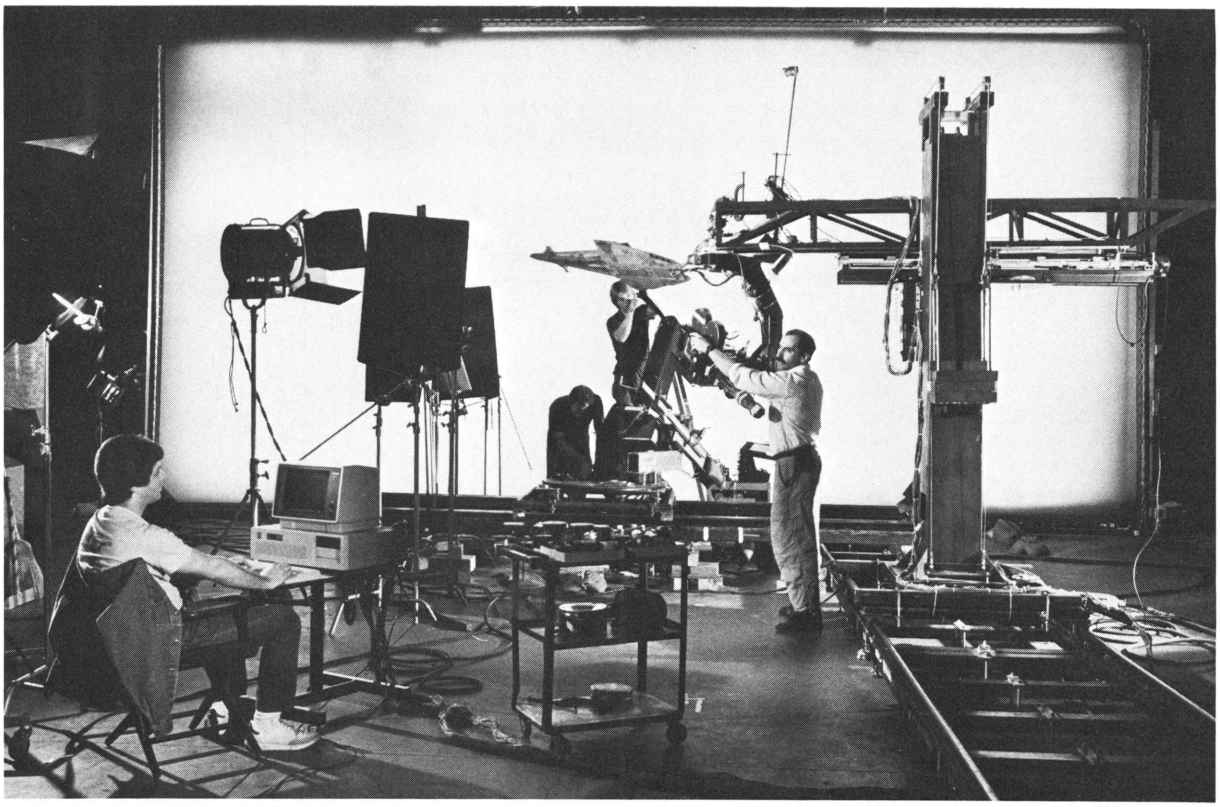
The large floor space afforded by these pavilions was a blessing for art director John De Cuir, Jr., however. They afforded the necessary area for construction of the massive interiors of the *Earth*Star Voyager*.

De Cuir, whose recent credits include *Ghostbusters* and *Top Gun*, was faced with a formidable challenge – he had all of four weeks of prep and about eight weeks of construction with which to create a brave new world.

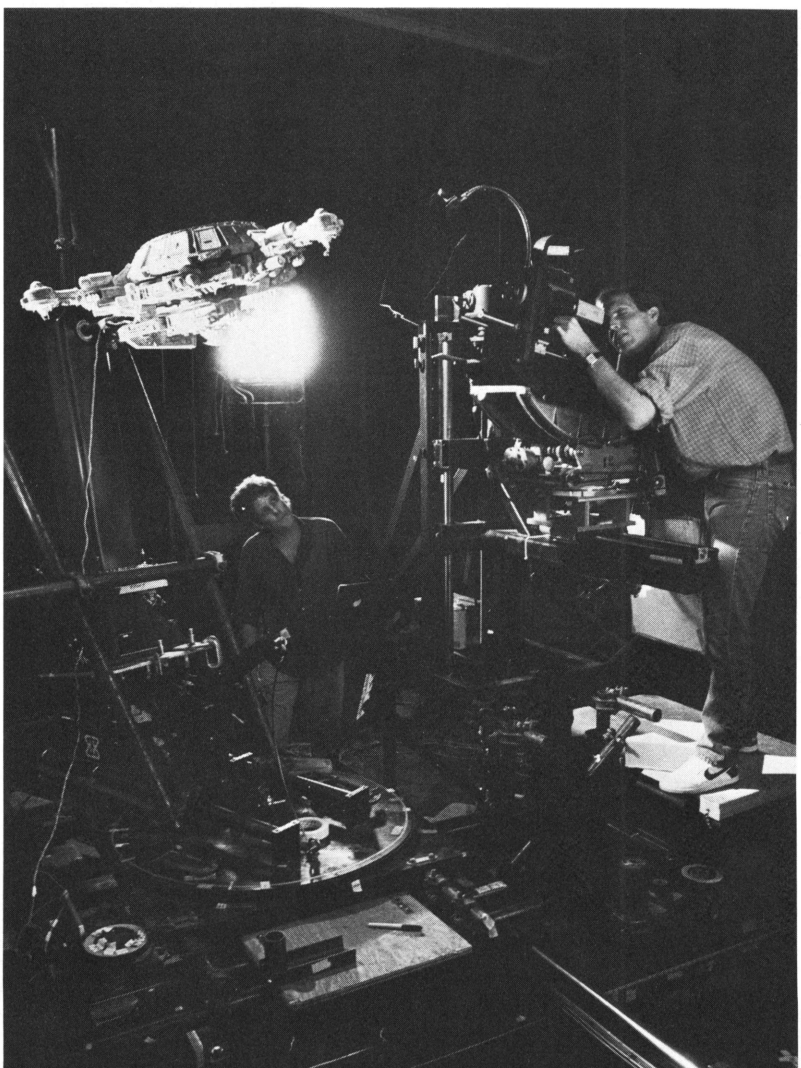
"The set was magnificent," remembers Stevens, "but we were pretty locked in to how the set was lit. It would have been easy to put fluorescent lights overhead, and give the picture that full look, but we decided to use smaller units and to go for more texture. We did have some flourescents on a strip down each side of the corridor set, but they were there primarily for looks, not illumination."

As is usual for a television project, the technical challenges were coupled with an abbreviated shooting schedule. Much of the action was staged in the *Earth*Star Voyager*, and both Goldstone and Stevens knew they would have to make some effort to vary the lighting to maintain visual interest thorough the four hours.

"The schedule always has to be



Team from Boss Film prepares blue screen shot for Earth Star Voyager. **Below:** ***John Schreiber and Gary Waller photograph the ship.***



a consideration in TV. We had a 40 day shoot – if we'd been shooting a feature we would have gone 60 or more. You have to keep your time frame in mind when you're lighting, and we couldn't always make some of the subtle lighting changes we would have liked, it just wasn't feasible.

"I may be exaggerating," continues Stevens, "but I'd say 99% of the locations are interiors, all artificial light. Nineteen days were spent on the bridge of the *Earth*Star Voyager* alone."

An aspect of the Voyager's bridge set designed by De Cuir is a large display screen, which utilizes a dual projector rear-screen video system supplied by Video Image.

The dual projectors were aligned to maintain the intensity of the video image if Stevens and his crew moved off axis to the screen for a shot, but it still served to limit the possible camera angles, and set the stage for a minor photographic crisis.

"The electronic rear screen projection was one of the reasons for the low lighting levels Bobby used," says James Goldstone. "We were lucky to get a 2.8 on some scenes." But the ratio of room light to screen illumination was only one of several considerations.

"We were in outer space," Ste-

vens explains, "and if you accept the fact that in space everything is black – that there is an absence of light – then all the light sources had to appear to be practical. Also, with all of that time spent on the bridge it was important to maintain visual interest throughout the length of the mini-series."

With the relatively low light levels, and the consequent wide aperture settings, the depth of focus was greatly restricted. Stevens and Goldstone took advantage of this photographic phenomenon in staging the picture, but back in Burbank the executives at Disney took exception to the look.

Stevens smiles, "They went through the roof! They felt the look was too contrasty for Sunday night at 7:00 p.m. They didn't like the backgrounds falling off in focus. They *always* wanted light on the faces. We made some adjustments and they were pleased with the results."

"Bobby and I went over what each scene looked like and felt like," adds Goldstone. "We discussed the context and mood, and we varied the light to suit the situations, keeping to the high contrast, lower key look that we were after. We may have gone a little too far on one scene or another, but we found a happy medium."

Even with the relatively low light levels, Stevens was very careful to get a well exposed negative. "You have to produce a negative they can work with – you don't want it too thin or too heavy."

The negative and dailies were developed and printed at Seattle's Alpha Cine Laboratory. Stevens feels that it is important to set the printing lights with the lab and then to go for one-light dailies. "It is the only way you can really gauge what you're getting, the only way you can see the day to day changes in the lighting.

Stevens was comfortable working with director Goldstone, "He's of the 'old school' – he sets the shot, lets you light, then comes in and rehearses with the actors, and depends on the camera operator to let him know if there are any camera problems on a take – " but there were some minor problems with the largely Canadian crew.

"You can't fault the enthusiasm and spirit of the crew," says Stevens, "and all the key positions were strongly filled; but the secondary people fell off tremendously in terms of experience.

"Sometimes it was like a teaching experience, and I didn't feel I'd been around long enough to be a teacher. I like to start lighting with all the lamps at full flood, and often they didn't re-set the lamps when we started a new scene. Also, they didn't always catch burned out lamps. It made me watch the set closer.After the shoot one of the crew came up and thanked me and told me he'd learned a lot. It was the first film he'd worked on."

On completion of principal photography, the action shifted from Vancouver to Marina del Rey in Los Angeles, where Boss Films was contracted to do the special photographic effects for *Earth*Star Voyager*.

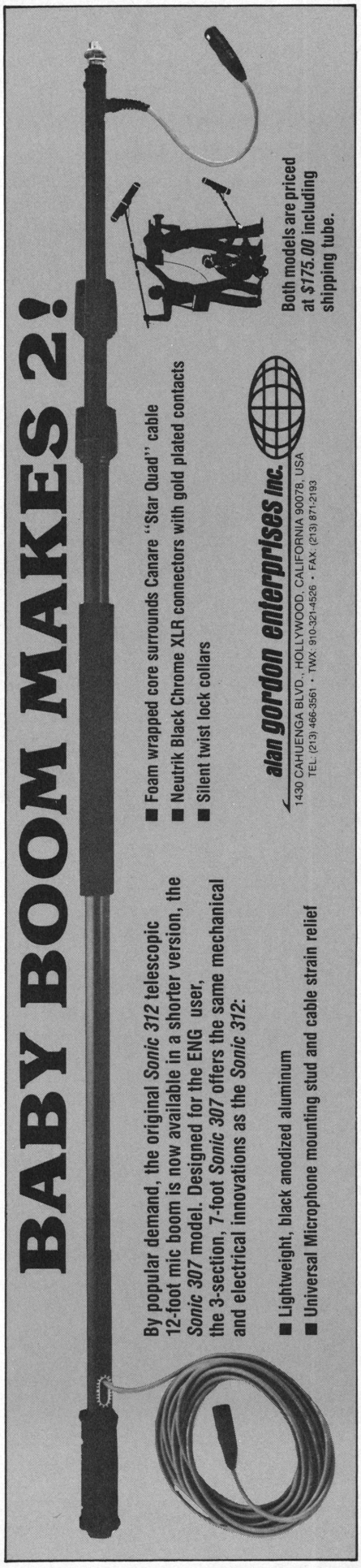
For anyone familiar with the high-tech visuals that are the product of a special effects house like Boss Films, a visit to the studio must be something of a surprise. Sure, there are the computers and motion control systems one would expect, but for every piece of state of the art gear there also seems to be a fair amount of spit and bailing wire holding everything together. The labyrinth of black-draped work areas resembles very closely photos of some of the earliest film studios.

Richard Edlund, ASC, president of Boss Films, quickly acknowledges the similarity. "Many of the techniques we use have developed over nearly 100 years," he says. "Georges Meliés did many of the same kind of things we're doing back in 1900. Of course, as the audiences have become more familiar with special effects, filmmakers have had to refine those techniques."

The models for the space ships in *Earth*Star Voyager* were built by Mark Stetson, and in many respects the efforts of Stetson and the technical people at Boss Films were worthy of any of today's big screen visual effects extravaganzas, but there were some subtle differences.

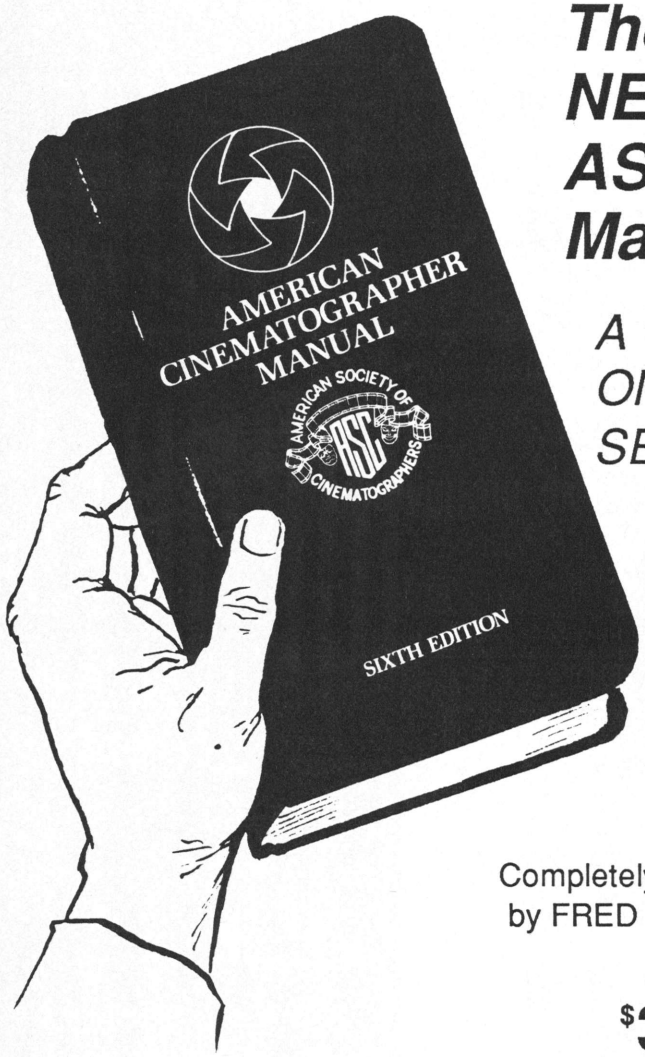
For Edlund *Earth*Star Voyager* was a rather special project in that it represented his first television effects work since *Battlestar Galactica* in 1978. "Television just doesn't offer the time or budget to produce the kind of sophisticated multi-element effects that have become a staple on the big screen," he says, and in fact he finds that although the techniques of creating visual effects for the small screen are essentially the same as those used for features, some adjustments must be made.

"I've seen some of the things I've done where your eyes had to travel across the whole 50-foot screen to take in everything, and when you put something like that on TV it often isn't very effective.



ORDER NOW

The NEW ASC Manual



A "MUST" ON EVERY SET!

Completely revised by FRED H. DETMERS

$34.95

The ASC Press
P. O. Box 2230, Hollywood, CA 90078

Please send ___ copies of AC Manual @ $34.95 each. Payment with order.
Add $2.50 postage in U.S., $3.50 Foreign. California residents add $2.27 State Tax.

Name _____

Address _____

City _____ State _____ Zip _____

☐ Payment enclosed ☐ Charge my VISA ☐ MASTERCARD

Card # _____ Exp. Date _____

Signed _____

Allow 6-8 weeks for delivery. U.S. funds only.

So, I knew we would have to compose for the TV screen, and deal with the relative scales in a way that would come across at home.

"Also, when you're shooting for TV it always helps to shoot your effects shots *long* to allow some leeway in the editorial process. Television tends not to be as tightly pre-planned as a feature, and you often need some extra footage to play with."

Another consideration was that for convenience and economy all of the effects for *Earth*Star Voyager* would be shot in 35mm, whereas much of Boss Films' big screen work is produced in 65mm to minimize any image deterioration through the many stages of printing and duping that are required to achieve the final composite effects shots.

"We didn't do any of the matte shots," says Edlund, "because when we were brought in they had already shot the plates in the VistaVision format, and we're not set up for that; so those few shots were done at the Disney effects shop in Burbank, but all of the other space shots we did.

"We looked at what Robert Stevens had shot so that we could match the style and the mood, but by the time we were working he was already finished and on to something else. Of course we did work closely with James Goldstone and the Disney people.

"In a sense," continues Edlund, "the material we shot was so alien to the rest of the film, that there wasn't the same need to be involved all the way through the project as we would be in a picture where the effects were more closely integrated with the story. The material we were asked to provide places everything in context and is there to provide the sense that we are in outer space, but the film itself is very much a human drama."

First proposed as a series possibility, the two-part *Disney Sunday Movie* may well serve as a pilot for the continuing saga of Captain Jonathan Hays and his crew if the audience response is favorable. So, bon voyage, *Earth*Star Voyager;* the world, and civilization as we know it, are in need of regular and on-going salvation. May the Nielsens be with you. △

SUPER8 SOUND DOUBLE SYSTEM

A Complete Production Facility

$6995.00



Mag IV

- ***Fullcoat Recorder:***
  On location, the Mag IV records Sync Sound directly onto Super 8 fullcoat and features crystal, once-per-frame and pilotone sync capabilities.

SUPER8 SOUND

For fifteen years, Super8 Sound has set the standards for low budget film/video productions. If you want broadcast quality images without spending a fortune, talk to the experts at Super8 Sound.

- 95 Harvey St., Cambridge, MA. 02140
  (617) 876-5876
- 2217A West Olive Ave., Burbank, CA. 91506
  (818) 848-5522



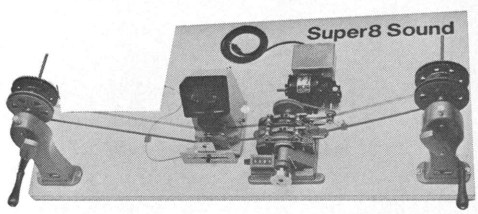
Nizo 6080

- ***Camera:***
  Super 8 Crystal Sync Sound gives you broadcast quality images with the same production capability as 16mm & 35mm film.



Porta One Ministudio

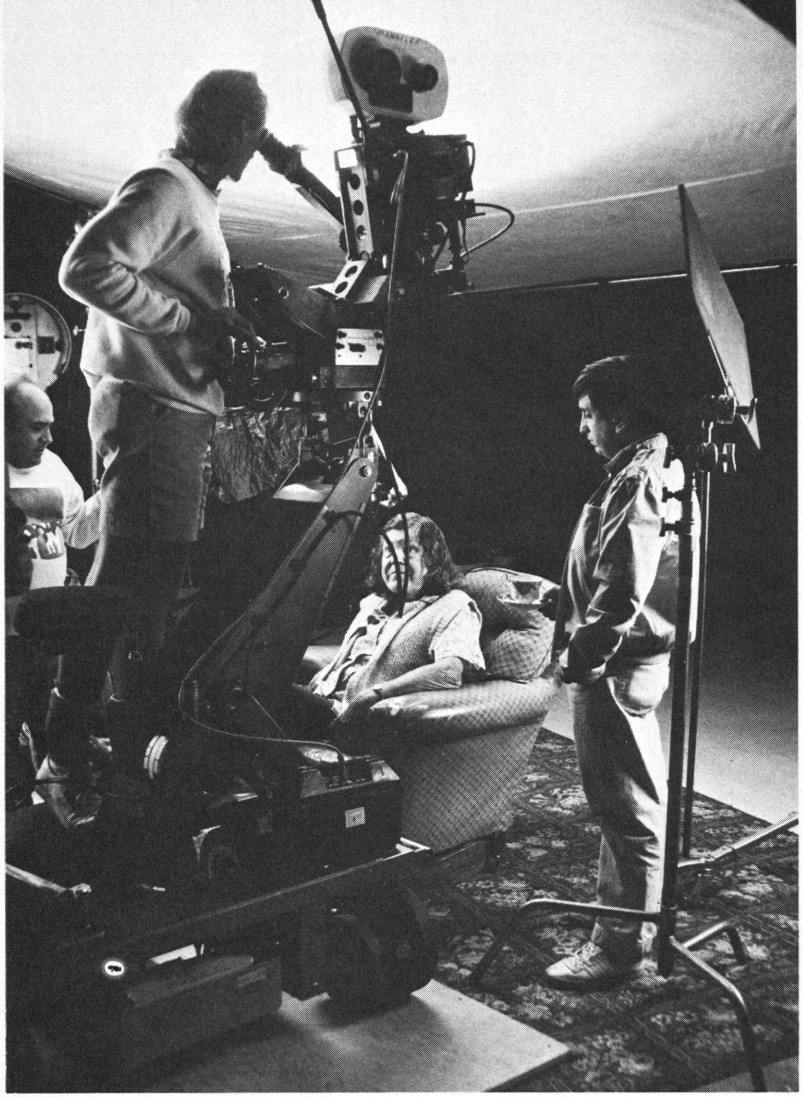
- ***Multi-track Cassette:***
  For a textured, multi-layered soundtrack, the Mag IV can electronicly interlock with any multi-track recorder to mix any number of edited mag tracks.



2 Gang Bench

- ***Editing Bench:***
  Double system editing with Super 8 Mag is the most creative means of frame accurate editing of picture and multiple soundtracks.

HOW GOOD DOES SUPER 8 LOOK?
Call for our demo reel or attend one of our Super 8 Double System Production Workshops.



Crew lines up high angle shot on Anne Ramsey, who plays Momma.

Photos by Laurel Moore

Wacky Style for *Throw Momma From the Train*

Produced by Larry Brezner
Directed by Danny DeVito
Photographed by Barry Sonnenfeld

by Marc Daniel Schiller

Barry Sonnenfeld tells a story about how Danny DeVito was first introduced to Sonnenfeld's work. DeVito and his then-pregnant wife, Rhea Perlman, went to the movies one evening to see *Blood Simple*, a comedy-thriller written and directed by Joel and Ethan Coen. DeVito claims that the film nearly sent his wife into labor. It was Sonnenfeld's first feature film as a cinematographer.

When DeVito went into pre-production on *Throw Momma From The Train*, he remembered Sonnenfeld's work on *Blood Simple*. In the interim he had shot a second film for the Coen Brothers, *Raising Arizona*, as well as two others—*Compromising Positions* and *Three O'Clock High*. For his first feature film as director, DeVito wanted a highly stylized movie and chose Sonnenfeld because of his reputation as a cameraman who takes risks.

From his work with the Coen Brothers, Sonnenfeld has developed a method that seems to accentuate the humor as the camera takes on a role of its own. It is a style that Sonnenfeld simply calls "wacky"; making camera movements with extreme angles and lenses so that the camera becomes part of the physical comedy.

Throw Momma From The Train is a battle of wills between Larry Donner (Billy Crystal), a creative writing professor, and one of his students, Owen Lift (DeVito). Larry hasn't written a word since his ex-wife reached the best-seller lists with a novel she stole from him and published as her own. Owen, meanwhile, lives every moment under the torment of his overbearing mother. Owen has somehow come to believe that he and Larry have made a pact—he'll kill Larry's ex-wife and Larry will do away with Momma. The problem is that Larry has trouble getting through to Owen. Utilizing the premise of Alfred Hitchcock's *Strangers On a Train*, *Throw Momma...* is a comedy about two people struggling to be understood by each other.

In collaboration with DeVito, Sonnenfeld is able to let us laugh at the characters rather than

simply at the humorous situations and gags. Sonnenfeld feels that this is mainly because *Throw Momma . . .* is not lit like most comedies. "In fact," he points out, "Danny wanted a movie that didn't look like a comedy at all. He said very early on that when the movie was done he would rather have people say that Danny DeVito made a film that was overstylized and too dark than to have people say that Danny DeVito's *broad* new comedy is very funny." The statement made an impression on Sonnenfeld, and allowed him a freedom with which he felt comfortable.

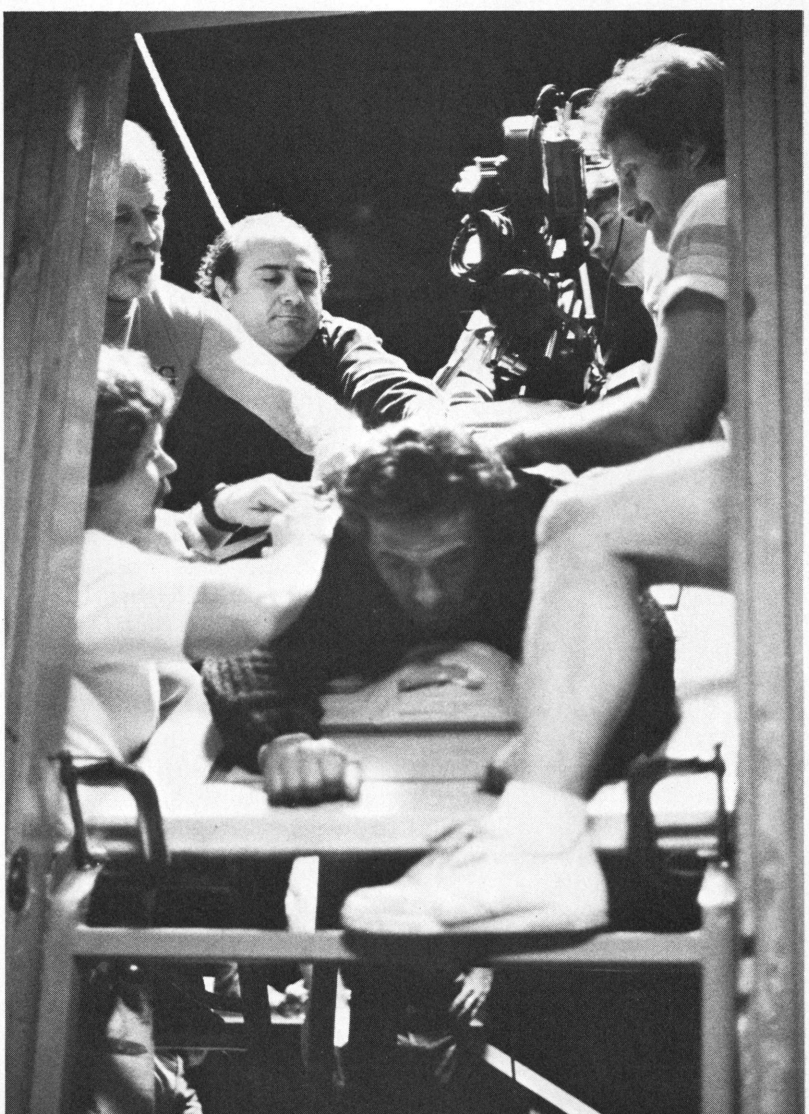
"It's very rare that you have the opportunity to light a comedy dark," Sonnenfeld explains. "It's much more fun for a cinematographer to light dark than bright. Throughout the shooting Danny kept saying, 'Is this going to be too bright?' Some people think that a comedy will be funnier if the lighting is fairly flat so that you can see everything that is supposed to be funny. But in fact the opposite happens because flat lighting gives everything equal value in the frame. It does not allow the director and cinematographer to control things."

It is this lack of control which Sonnenfeld believes hurts most comedies. "It's similar to why cameramen don't like to shoot outside in the daytime," Sonnenfeld explains. "You can't tell the audience what is important and what is not within the frame. This is why in commercials they use 600mm lenses so that you can control the frame through focus." Sonnenfeld's solution is to have the walls painted dark whenever possible and bounce the light off the walls so that suddenly your actors are what's most important in the frame.

"I like the faces to have a certain amount of contrast," Sonnenfeld explains. "You can achieve this two ways. You can use direct light and contrast by the way it hits the face, or you can use a soft light, as I do, with no fill from the other side. For example, there is a scene in *Throw Momma . . .* where Larry is in a hospital room. I had all of the lights coming through the windows on one side of the room. The wall on the opposite side was too white. Even though there was no fill light, the light reflecting off the wall was too bright. When it bounced into Billy's face, it made the lighting too flat. To knock down the light I had to put black up to prevent it from hitting Billy's face. The worse thing to do in a comedy," Sonnenfeld stresses, "is to bounce the lights onto the ceiling, but there are a majority of directors and cameramen who think just the opposite."

Working closely with Sonnenfeld was production designer Ida Random *(The Big Chill, About Last Night* and *Silverado).* There were certain things in the art direction that Sonnenfeld wanted to stay away from. "I had certain requests for Ida," he states. "There were a few colors I didn't want to use. In situations where I knew prior to shooting that I wouldn't be able to control the light very well, I asked her to stay away from colors on the walls that were too close to flesh tones. I was afraid of certain pinks and peaches. I like green walls. If you let a lot of light hit a green wall, the faces will stand out nicely because the color is so different. Ida was great about painting certain walls in Owen's house in very dark greens and reds that are almost black. I didn't have to worry very much about the light hitting the walls because the colors just absorbed the light and didn't reflect back onto the actors' faces."

Sonnenfeld also asked Random to build certain electrical sockets into the ceilings so that he could hang 4x4 bay lights. It is a soft top light that Sonnenfeld credits to Gordon Willis and the lighting of *The Godfather.* He uses it often. In order to hide the lights, sockets must be made to hang low. Because Sonnenfeld likes to shoot low with wide lenses, there is always the danger of seeing the ceiling. "I



DeVito positions camera and stuntman for wild ride down a flight of stairs.





Top: ***Sonnenfeld and crew shoot night scene at Leo Carrillo Beach on the California coast.*** **Below:** ***Sonnenfeld and DeVito discuss their next move.***

spend more time moving ceiling pieces than I do in actual lighting," Sonnenfeld proclaims with a laugh. "The joke was that I would always call for a 21mm about a foot off the ground. It's a nutty way of shooting."

Sonnenfeld likes to characterize his style of shooting with terms like "wacky," "nutty" and "crazy." "Danny and I worked out each scene together beforehand," Sonnenfeld maintains. "Slowly over the day we would come up with ideas and add elements to scenes. Our goal was to throw out scenes that were not visually interesting. We would do our storyboards while lying on the ground. Days later we would look at them and say, 'Was this the classroom?' Danny would say—'Well, it must be.' The following week we would realize that it was the tunnel stunt sequence. The storyboards were really funny so I had Danny autograph them."

An important part of the collaboration between DeVito and Sonnenfeld was in designing shots that would make subliminal connections between Owen and Larry. DeVito discussed with Sonnenfeld exactly which editorial cuts would be made to link the two characters together. With this in mind, Sonnenfeld was able to put both characters in the same predicament by his placement of the camera. For example, in one sequence we see from a high angle Larry staring at the typewriter, unable to compose a sentence. A direct cut is made to a high angle shot of Owen typing away furiously page after page.

Sonnenfeld lauds DeVito as a director who clearly understands and respects cinematography and praises him for creating an environment in which the cinematographer is able to do his best work. "Sometimes I am somewhat selfish in that I want to put the camera where it might be best just for lighting," Sonnenfeld admits. "I always prefer a dark that has a lot of contrast. Danny immediately knew what I meant and we worked together to achieve it. For example, I always like to place the actors so that my lighting source is very strong from one side."

Early on in the shooting Sonnenfeld was faced with a week of filming in the classroom where Larry teaches. The right side of the room was all windows. "I wanted to put the camera in such a place that the windows lighting up Billy Crystal are lighting the shorter, less seen, side of his face," Sonnenfeld explains. "Not only did I want to put the camera near the windows but I wanted to have the actor looking camera right so that the side of his face that the light from the windows is hitting is the side we see less of. This leaves the broad side of the face darker and creates more contrast. If you light the side of the face you see more of, the lighting looks flat."

Because Sonnenfeld pumped all of his light through the windows it was important that DeVito stage the scene to accommodate the lighting. "I was really appreciative that Danny understood and was willing to make some changes. When we had the choice on which side of the line the actors would look, Danny agreed to have the actors look at the side that would have the short side of the face lit up. This sometimes forced us to make certain dolly moves so that Billy wouldn't cross the line when he walked towards the door."

Sonnenfeld likes to use wide angles. He says about one half of the shots in *Throw Momma...* were done with the new 21mm Primo lens by Panavision. All of DeVito's close-ups were shot with the 21mm. "We shot lots of tests and Danny liked what the 21mm did to his face." Sonnenfeld explains. "Most actors wouldn't want to be seen anywhere near a 21mm. But Danny liked how it elongated his face and gave him a little bit of an edge. For Billy, we used it only a couple of times for comic effect. Most often we used a 35mm or 40mm for Billy, and a 75mm for the female lead, Kim Greist. I found out on *Raising Arizona* that wide angle lenses are funnier. It's a subtle thing. Also lower is funnier than higher. Lower angles make people

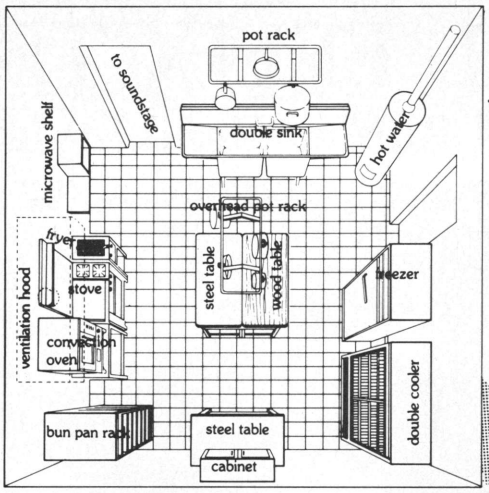
slightly bigger than life."

Sonnenfeld likes to put the camera at an angle which we don't see much in everyday life. He praises the new Primo lenses as being distortion-free. The wide angle gives more of a depth of field which Sonnenfeld claims lends a "cartoony" feel to the shot.

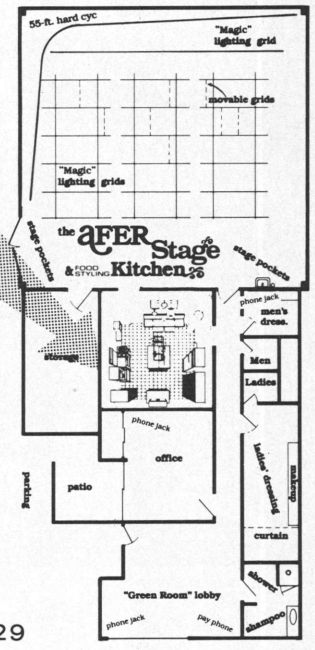
Sonnenfeld also credits using Kodak's 5247 stock as giving *Throw Momma...* the beautiful contrast look that was needed. After having numerous bad experiences with 5294, Sonnenfeld decided to shoot this film with '47. "It was funny," he comments, "another cameraman came onto the set one day and couldn't believe how many lights I was using. When I told him I was using '47, he didn't believe me. My sets are extremely bright, even for a night scene. I use a very small f-stop, usually f8. Most people think that I'm using f2 and they get very worried when I tell them that it's an evening shot."

For the night sequences, Sonnenfeld used 5297 balanced for daylight at ASA 250. Daylight balanced lights, arcs and nine lights, were used as well. Rather than underexposing the film, Sonnenfeld made *Throw Momma...* extremely dark by overexposing the stock and printing it down in the lab.

"I have been very fortunate with CFI on the West Coast," Sonnenfeld states. "I don't know of any other lab on the West Coast that will time all of your dailies. I don't think that it's realistic to stick with one set of timing lights throughout a show. Different lenses have different coatings and the timing has to be adjusted. For example, some tend to be magenta or kind of warm. Cooke 5-1 lenses are red. Zeiss Super-speeds are magenta. If you use both of these lenses for the same scene, and the dailies are timed at one timing light, the footage will be all over the place. CFI times all of the dailies, and this is something that I am used to with DuArt in New York. I think that CFI did an incredible job. The best lab is the one that you have a personal relationship with. Mine is with CFI and DuArt, but other



SHOOT YOUR FOOD COMMERCIALS AT the AFER Stage & FOOD STYLING Kitchen



A food styling kitchen opening onto the best little soundstage in Atlanta.

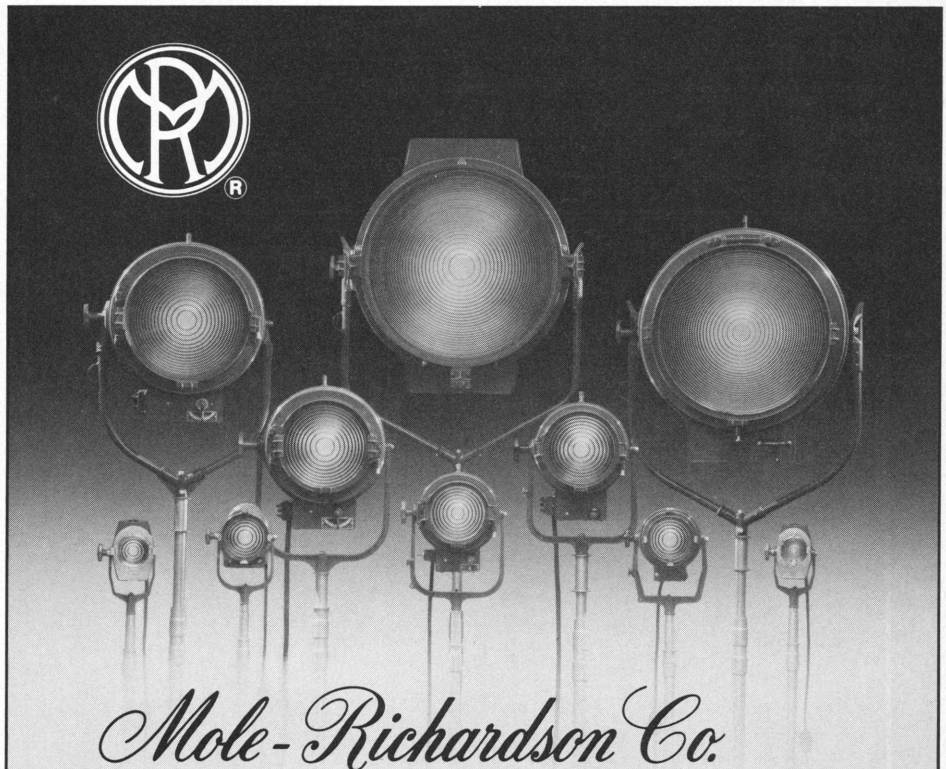
At your disposal: Blodgett half-size convection oven ☐ gas stove with griddle ☐ gas fryer ☐ cooler and freezer ☐ double sink.

Stage includes free light and grip package.

404/325-3676

Atlanta Film Equipment Rentals

1848 Briarwood Rd., NE, Atlanta, Ga. 30329

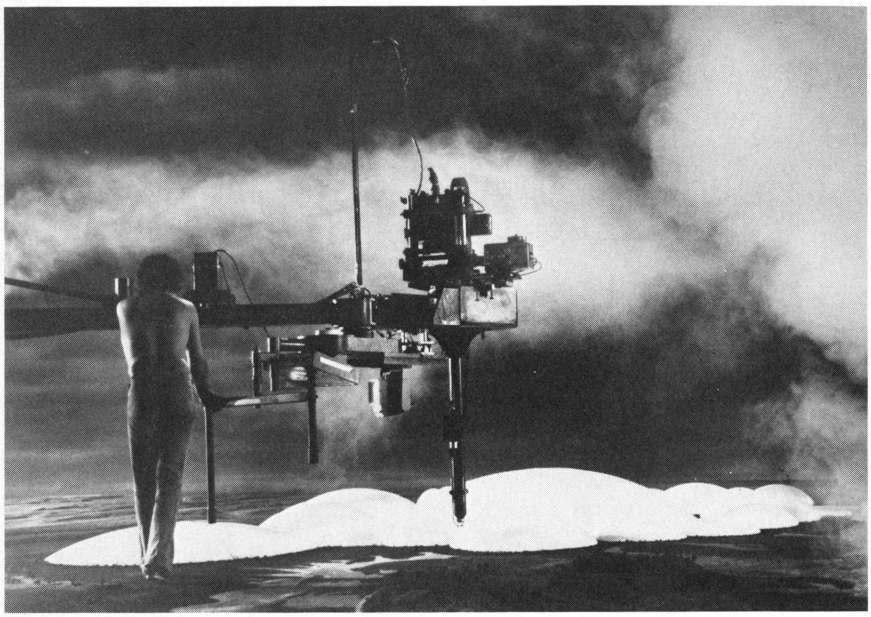


Mole-Richardson Co.

60 years of quality lighting—Designers and manufacturers of specialized lighting equipment for the motion picture, television and professional photographic industries.
937 North Sycamore Avenue, Hollywood, California 90038-2384, U.S.A.
TWX 910 321-4615; cable MORINC, Hollywood
telephone (213) 851-0111

SPECIAL EFFECTS

Wire, Tape and Rubber Band Style



(Photo is of Kenworthy Snorkel Camera in use on "Logan's Run")

. . . a book about MOVIE MAGIC

The late L. B. "Bill" Abbott, ASC, originated many of the illusions that made movie special effects plausible. He began when the movie business was young, was long-time chief of special effects at 20th Century-Fox, and completed a brilliant career in the '80s. His legacy is this book, which tells how a flying saucer was landed in the heart of Washington, D.C.; Paul Newman and Robert Redford leapt 80 feet into a rocky creek; the world's tallest building was destroyed; Raquel Welch took an odyssey through a man's bloodstream; James Mason almost was devoured by a giant lizard; the luxury liner Poseidon was turned upside down; Rex Harrison rode a giant moth to the moon; and much, much more.



The ASC Press
P.O. Box 2230
Hollywood, CA 90078

$29.95

Add $2.50 postage and handling per copy USA: $5 per copy foreign. Calif. residents add $1.95 state tax. U.S. funds only.

Please send _____ copies Special Effects—Wire, Tape and Rubber Band Style

Name _____

Address _____

City _____ State _____ Zip _____

☐ Payment enclosed ☐ Charge by VISA ☐ Mastercard

Card # _____ Exp. Date _____

Signed _____

Allow 6–8 weeks for delivery

cameramen have it just as good at other labs."

Many cinematographers have a piece of equipment that they have developed and are accustomed to using which then becomes their trademark. Sonnenfeld's trademark is the "Shakycam." Mounting an Arriflex camera with a 9.8mm lens at the center of a long 2x4 piece of wood, Sonnenfeld is able to create a movement with the camera that can feel like a roller-coaster ride even for someone sitting in the last row of the theater. While there is no camera operator to look through the lens, a grip is on either side of the long wooden board. The grips run with the contraption making sure that the horizon is straight—just as with a Steadicam. The shot is so wide that you don't have to worry too much about framing. In *Throw Momma* . . . Sonnenfeld once again brought out the Shakycam.

In one sequence on the train, Momma (Ann Ramsey) thinks that Larry is a killer. She tries to run away from him and runs the length of the train to the last car although we, the audience, don't know this. She opens the last door and stares out at the track in horror. "We took advantage of this little moment," Sonnenfeld says, "and did a series of shots with the Shakycam. We started the shot with the Shakycam traveling just inches above the rails of the train tracks. As we got closer to the train car, we boomed up with our arms right into Ann Ramsey's face. We ran the camera at 18 frames per second. The effect is that your stomach really drops out for a moment. The audience gets an emotional feeling from the shot. You physically feel from the shot that she is at the end of the train."

The sequences on the train posed the greatest challenge for Sonnenfeld. While the script calls for a high speed stunt sequence on the train, Sonnenfeld was faced with a train that would only go 12 to 15 miles per hour. For as many times as possible, the shots were filmed at 18 or even 12 frames per second. The actors had to accommodate this by moving slightly



No matter how you look at it, Wisconsin is a great place to shoot film.

Our state offers a beautiful setting, along with all the talent, technicians, facilities and services you need to get rolling.

And once you've settled on a location, we'll give you behind-the-scenes help with permits and anything else you might need to give your movie a happy ending.

So call for our free production guide. And see Wisconsin in a whole new way.

Wisconsin Film Office.

(608) 267-FILM.

Division of Tourism Development
P.O. Box 7970, Madison, WI 53707

Wisconsin. Look At It This Way.

AFC ASSOCIATION OF FILM COMMISSIONERS

WE'VE BEEN AROUND A LONG TIME!

BLACK DOT

TEXTURE SCREENS

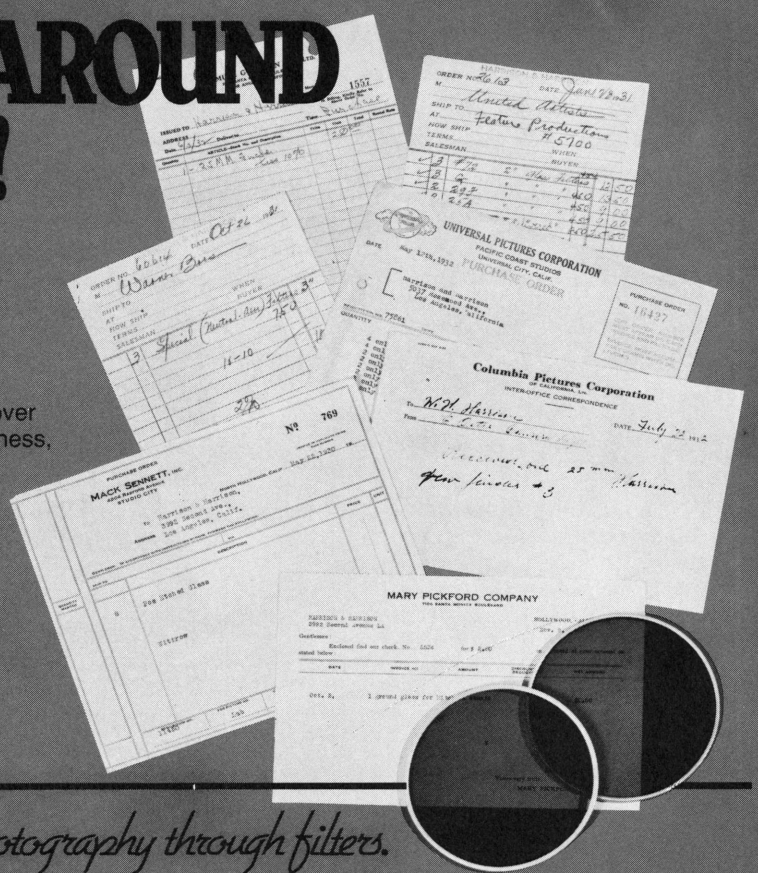
The first improvement in diffusion screens, in over forty years, is now available. Ready to: reduce harshness, eliminate whitish veiling, keep colors brilliant, and produce little or no halations.

Matched sets of (5) grades are serialized to assure consistent uniformity of high manufacturing tolerance, backed with 50 years of experience.

Ordering today will insure a CLEAN image tomorrow. Call or write for free literature.

Harrison & Harrison

P.O. Box 1797 • Porterville, California 93258-1797
Phone: (209) 782-0121 • Cable: HARALINE



...Pioneering advancements in photography through filters.

DELTA DOLLY

A COMPACT ALL TERRAIN PEDESTAL DESIGNED TO EASILY TRANSPORT AND SUPPORT YOUR CAMERA ON LOCATION.



EGRIPMENT CAMERA SUPPORT SYSTEMS. THE WORLD'S STANDARD.

EGRIPMENT USA/L.A.
7240 VALJEAN AVENUE VAN NUYS,
CALIFORNIA 91406, USA
PHONE: (818)-989-5222, FAX: (818) 994-8405

EGRIPMENT
MACHINEWEG 22, PHONE (2945)-3988
1394 AV NEDERHORST DEN BERG, HOLLAND
TELEX: 10254 GRIMA NL. FAX: (2945)-4658

egripment

Introducing Larry's Bag.



The first filmmaker's bag designed by a working filmmaker. Provides ready access to accessories in any working situation. Holds most 16/35mm 400′ magazines plus Matte Box, rods, French flag, Slate, etc. 8″x16″x16″ compartment with padded adjustable/removable dividers. Cordura nylon. All Velcro closures. Foam padded throughout. Meets carry-on requirements. Weighs less than 5 lbs. Navy blue. $250. post-paid. Satisfaction guaranteed. For complete information, call or write:

Larry Huston Studio,
40 E. 21 St., N.Y., N.Y. 10010
212-777-7541. Patent 284,333



THE CANADIAN CONNECTION

AATON CAMERAS
COOKE LENSES
RONFORD BAKER
CAM-RAIL
STEENBECK
LTM LIGHTING
LEE FILTERS
KINGSWAY MATTE BOX
FLEXFILL

SALES-SERVICE-RENTALS

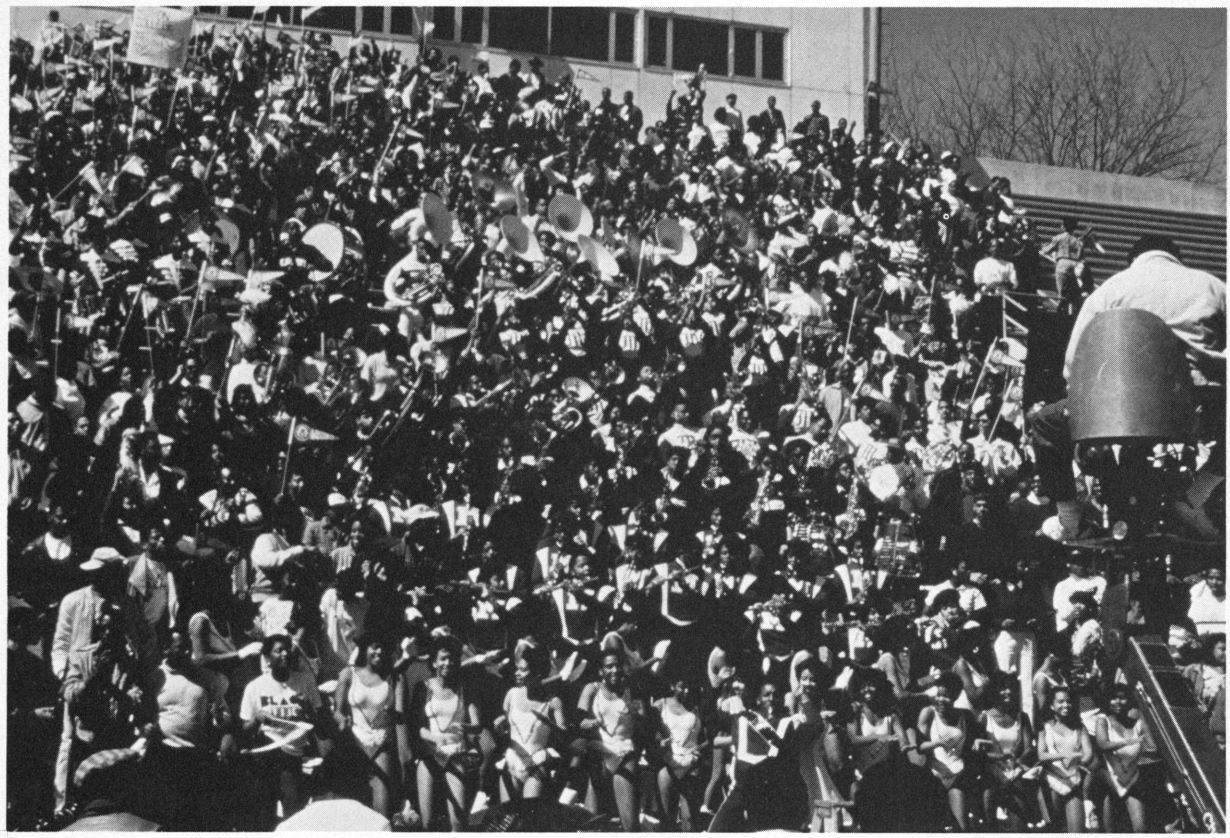
Kingsway Film Equipment Ltd.

1665 Enterprise Road
Mississauga, Ontario
Canada L4W 4L4
Tel: (416) 672-2880
Fax: (416) 672-2688
Telex: 06-967528

slower so that the camera would capture a feeling of speed in the background. Additionally, Sonnenfeld used longer lenses to get the background to appear to move faster. Rather than using a 21mm, he chose to use a 40 while on the train. The 21 seemed to take the "shake" out of each shot. Sonnenfeld claims that he drove his operator, Todd Henry, crazy by holding on to the handle and shaking the camera as they shot the sequences hand-held. The energy with the camera was needed to give the scene more of a sense of danger caused by the speed of the train. Often Sonnenfeld would tell the grips to loosen a bolt or an arm on the dolly in order to get more shake in the lens. The problem was that grips are too used to tying things down.

Sonnenfeld likes to stress that one of his goals as a cinematographer is to make the camera become an emotional player in the scene. He cites a scene in *Stagecoach* as the best example of this. "There's a great shot at the end of the movie where you think that John Wayne is dead. The camera does a slow track in on the woman who is Wayne's love interest. You think that the camera is moving in because she's crying about Wayne being dead. But as the camera moves closer, her expression changes. Suddenly John Wayne enters what turns out to be his point of view. It's a magnificent shot that I love to steal from. I like to convince directors that the camera can say as much as a line of dialogue. The scene from *Stagecoach* is an example that proves it."

Sonnenfeld has developed a style that takes risks with the camera. He is not afraid to create unmotivated camera moves. While he may be criticized for being too self-conscious with the camera, it is a style that is unique and always interesting. "Many people are going to see *Throw Momma*... and quickly say that this or that is a 'Sonnenfeld shot.' But I think that as much as it is a 'Sonnenfeld shot' it is Danny's directing. Danny understood that the camera can be a source of humor. I feel strongly that a cameraman is only as good as his director." △



Dickerson manipulates camera to make crowd seem considerably larger than it is.

School Daze
Black College Is Background

by Linda Lynton

Produced and directed by Spike Lee
Photographed by Ernest Dickerson

There have been plenty of films made about college life over the years, but Spike Lee's *School Daze* is probably the first film to ever focus specifically on the Black college experience.

Based on Lee's observations from his college days at Morehouse in Atlanta, the film explores the conflicts of class and color among students of a fictitious, well established Southern Black school called Mission College. The action takes place over homecoming weekend, starting Friday night and ending Sunday morning.

"School Daze is about student apathy and class divisions within the Black community," said cinematographer Ernest Dickerson who has collaborated with Lee on every one of his films since they were both graduate students at NYU Film School. Dickerson himself attended one of Lee's school's traditional rivals, Howard, in Washington, DC.

"Mission College has financial interests in South Africa, and the main character – Dap, played by Larry Fishburne – leads a campaign to persuade the school to divest them.

"However, most of the students either aren't interested in his activist movement or don't want to rock the boat. They just want an education in order to get a good job," he said.

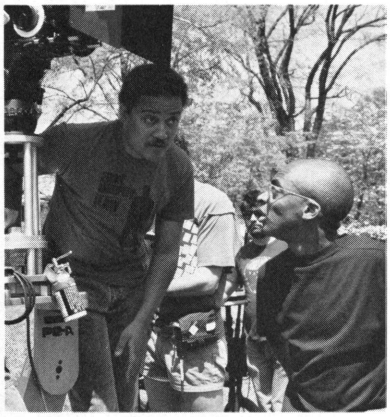
The tension is heightened by class divisions. Dap and his friends, who collectively call themselves "the fellas," come from poor backgrounds and are the first members of their families to attend college. As might be expected, they are the most politically aware, yet at the same time they are afraid of making waves, especially when the embattled school president, played by Joe Seneca, threatens them with expulsion.

Dap's own cousin, Half Pint, played by Lee, is trying to become a member of the elitist, upper middle class fraternity, Gamma Phi Gamma, headed by Julian (Gian-Carlo Esposito) who is a major antagonist in the conflict.

The Gammas, as fraternity members are called, are all children of successful Mission College alumni and are consequently more

Right: *Atlanta University is locale for campus scenes from School Daze. Below: Lee at left, Dickerson,*





traditionalist than their poorer peers.

Although the tension builds up until Dap realizes he is "talking to a brick wall, for even his friends start questioning his motives," the film ends on a high note. "Everyone comes together at the end of the weekend because they finally understand that they have one common identity: they are all Black Americans," said Lee.

But don't let the intensity of this story fool you. *School Daze* is a musical comedy in the Grand Old MGM Tradition (although it's Columbia which is footing this bill). There are five main characters, 75 speaking roles and a cast of [apparent] thousands – Dickerson manipulates his camera so 500 extras look like 5,000. There are also eight musical numbers and crowd scenes including one that stretches for a quarter of a mile into the darkness of the night.

This is quite a change from the low budget independent movies that Lee, Dickerson and production designer Wynn Thomas have worked on before.

She's Gotta Have It, which was Lee's first and at that time Dickerson's third feature film, astonished the film community in 1986 by being produced in 12 days on a total budget of $175,000. By the end of that year the film had grossed $7 million.

It was the critical success and profitability of this film that persuaded Columbia to put up $6 million to finance *School Daze*, which went into production in early March, 1987.

With such an enormous jump in film budget size even Lee admits that many people at the time openly wondered if he and his crew could handle it. Eight weeks later, when production ended on time, within budget and with no reshooting, it was clear they could.

Dickerson voiced a sense of technical and creative satisfaction from working with a larger budget and longer time frame than he had for his previous movies. "When I shot *Brother from Another Planet* in 25 days and *Krush Groove* in 24 days, it was a case of getting it done as fast as possible in the best way I could. Having eight weeks to shoot *School Daze* meant I had the time to put a lot more quality into each shoot," he said. Dickerson feels that the rigorous financial training of independent filmmaking helped the *School Daze* team create a "$6 million movie that looks like $15 million."

"The overall look of the film is a heightened, stylized realism. What we are trying to say with *School Daze* is that here is a Black college that has a long history and tradition, as many of them do. This feeling of tradition influences the way everything looks: There is a sense of age; not a contemporary, modern environment. We gave it an "ivy league" look with a lot of wood paneled rooms," said Thomas.

"However, we had to remove it a little from reality in order to prepare the audience for the musical numbers that take place. The look is very controlled. Heightened. For instance, when we built the fraternity house we made it a little bigger than normal. It's an old Victorian looking building with dark, rich textures and colors, but the look is a little exaggerated," he said.

Dickerson added: "We decided that the best way to capture the energy found in homecoming was to keep the camera moving. Shifting compositions and constant actor-camera choreography makes an energetic frame.

"I love this style of shooting because it makes dynamic cinema and frees the actors to let loose their energies in one take," he added.

Approximately 75 percent of the film was shot in the Atlanta University complex. Lee's old school refused permission to be filmed because it felt the audience might identify the college with the more negative aspects of the story.

The stage of the old Fox Theater in downtown Atlanta was used for a series of major theatrical numbers which included the crowning of the homecoming queen and two song and dance numbers.

In fact, most of the music springs out of situations within the story, such as the performances given at the theater.

"There is only one number that springs out of nowhere in the manner of the old MGM musicals, and that is the number performed in a beauty salon called Straight 'n' Nappy," said Dickerson. This scene and the Fox theater number, "The Sun is Rising," are both shot in the manner of a forties Technicolor movie.

"Spike and I looked at a lot of old musicals, like *West Side Story, An American in Paris, Singing in the Rain* and the Busby Berkley films to see how the treatment of dance has changed since then.

"It became clear that today there is a greater reliance on editing and close shots. In the MGM musicals the dancers were photographed full figure, which to me gives credit to the dance itself. After all, dance is about body movement interacting with positive and negative space within the proscenium, which in our case is the frame of the film," he added.

"Because the proscenium is often a stage in the MGM musicals, the dancers played primarily to an audience that was outside. There was very little camera movement around them.

"We wanted to produce the same effects with Straight 'n' Nappy, and not rely on things like cutaways. We used fluid camera movements, tried to keep the dancers full figure and stayed with them as they moved. Occasionally we'd go in for close-ups when something happened, but then we'd pull back for wider shots and let the dancers continue," he said.

Producing a forties Technicolor musical look was not the only challenge facing Dickerson and Thomas with this number. The walls of the beauty salon where the warring girl friends of the two social groups danced their "battle" over whose hair was the best were completely covered with mirrors.

"Wynn, who designed and built the set, had the mirrors placed on swivels so wherever the camera pointed, the mirrors could be titled so they reflected another part of the set instead of the camera," said Dickerson.

Twenty four dancers, choreographed by Otis Sallid, were used in this scene, with the music and lyrics written by Lee's father, Bill Lee, who also wrote the score.

Another feature of the film is the use of saturated colors coupled with "a subtle softness" in the images.

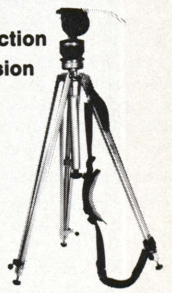
"I mainly used Kodak 5247, with some 5294. I wanted 5247 because of the richness it has – its color saturation and fine grain. I wanted to get back to a more classical look. In order to capture the variety of images found within the film, I used an Arriflex BL4 with a combination of Zeiss regular primes and superspeeds, as well as a Cooke 5:1 zoom and one of the new Angenieux 10:1 zooms," said Dickerson.

"I stayed with the regular primes as much as possible because they give a softer image than the superspeeds, for I wanted a certain softness to come out in the images. I also avoided stopping down past t/5.6, in order to avoid getting too much contrast in the image. My average t stop was t/2.8, even on exteriors, except with the zoom.

"I used a regular 85 filter on all exteriors, occasionally an 85 polarizer," he added. Dickerson has used polarizers since his days as a still photographer. He worked

Get a leg up on the competition with the FAST TRIPOD

SUPER STIX



- Aluminum construction
- Swiss-made precision
- Weatherproof
- Lightweight
- Ball level
- Rising column
- Carry handle
- Shoulder strap
- Velcro tie-ups

SuperStix *(Legs only)* ..... **$699.**
SuperStix w/Miller Pro 106 .. **$1625.**
SuperStix w/O'Connor 30 ... **$1995.**
SuperStix w/O'Connor 50 ... **$2895.**
SuperStix w/Sachtler 7+7 .. **$2995.**

IMAGE DEVICES
INTERNATIONAL

MIAMI	ATLANTA
1825 NE 149 Street	3311 Empire Blvd.
P. O. Box 61-0606	P. O. Box 82835
Miami FL 33181	Atlanta GA 30354
PHONE 305 / 945-1111	**PHONE 404 / 766-1111**

IDI ships anywhere in the world

"SCHOOL DAZE"
Camera Equipment Furnished by:

THE CAMERA DEPARTMENT

SERVICE spoken here...

- 35mm Camera Rentals
  - Arriflex BL4 and 35-3 • Zeiss Superspeeds
  - Angenieux HP • Cooke • CEI
  - Jurgen • Tiffen • Harrison & Harrison
  - Mitchell • Sachtler • Worrall
- 16' Iveco Camera Truck
  - Nitrogen equipped • loading room
  - heated/air-conditioned
- 50' x 70' Drive-In Sound Stage
  - 750 amps, clear • loading dock
  - complete kitchen • Production office
  - dressing rooms
- Certified repairs by our factory trained technicians

The Camera Department, Inc.
2135-N DeFoor Hills Road
Atlanta, GA 30318

Call Walter or David
24 hrs. a day, 7 days a week
at (404) 355-6999

CALL FOR ACTION IN MALAYSIA?

JUST CALL FOR PETER ROBINSON STUDIOS

Call us PRS for short. We can arrange sponsorships for all film and video productions. We are the longest-established house in Malaysia and our close contacts with local authorities will ensure fast, trouble-free productions, right from day one. Hire our crew or rent our comprehensive range of equipment, we'll get it done.

Latest equipment on our list:

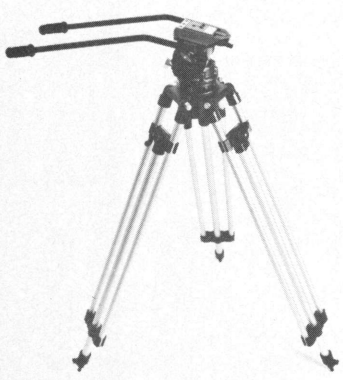
- Arriflex III (5 - 130 fps)
- Arriflex IIC
- Cooke Varotal 20:100
- Angenieux 25:250
- Arri HMI Lights
- Ikegami Camera
- BVH - 500 1" C Format Recorder
- Timecode recording, mixing, transfers
- Editron computer-lock systems
- And much more!

TELEX OR FAX
PETER ROBINSON STUDIOS
3, JALAN MENTRI
55100 KUALA LUMPUR, MALAYSIA.
Tel: 9851855, 9854546, 9853854
Tlx: 30646 Fax: 9844692

GET PRS INTO ACTION AND YOU'LL GET IT RIGHT!

Universal
Universal Fluid Heads (USA) Inc.

Tripod systems for cameras from 8 lbs to 50 lbs



Complete Tripod & Head systems priced from $584.35 to $1,759.00*.
Please call for your nearest Universal dealer
Universal Fluid Heads (USA) Inc.
800C Arcadia Dr.
Huntsville, Alabama 35801
(205) 533-9276 FAX: 533-9463
Universal Fluid Heads Aust. Pty.Ltd.
PH: 331-5789 FAX: 332-3937

*Recommended U.S. List Price

as a free lance still photographer for three years prior to joining NYU Film School. "Polarizers let you play with color saturation by controlling sky and light reflections in objects."

Minor diffusion was also used to soften the image further by using a light black Superfrost filter. "It gave me a nice texture without milking up my blacks, and flares very nicely around hot highlights and light sources,' he said.

Because the story takes place within 48 hours, Dickerson was concerned with getting the right colors to indicate different times of day. He also used lighting to enhance the wide range of different black skin tones found in the characters in the film.

"Differences in skin color is a major theme in the film. Most black skin has a reddish and/or yellow undertone and I've found that black skins come alive under a warmer light. Consequently most of my lights were gelled with 'bastard amber' filters to warm them up. Also, my tungsten lights were on dimmers so they could be dialed down to warmer temperatures and I used gold reflectors instead of silver ones," he said.

Dickerson added that many cinematographers cite problems photographing Black people because of the need to use more light on them. He feels that much of this problem can be alleviated by the deft use of reflective make up. "A light sheen from skin moisturizer is essential, not a lot, just enought to enhance its reflectivity. Also, you have to be careful about where you place highlights. I judged my exposures with reflected readings on Black people with a spot meter," he said.

"Because I wanted to capture all the subtle differences in black skin tones, I used Eastman Kodak's 5247 with its tight grain and increased color saturation.

"I rated the 5247 for EI 100 in tungsten and EI 64 in daylight with an 85 filter. The 5294 used in night shots was rated at EI 320 for tungsten. My printing lights were in the high thirties and low forties, for that way I was sure that my blacks will hold up to the release prints," he added.

A juxaposition of contrasting colors is also found in many scenes. For instance, during the Death March scene which takes place outdoors on the university campus at night, the contrasting orange light from flames and blue "moonlight" are the only two light sources.

"The students wanting to pledge for the fraternity are getting ready for the final degradation, the final task, before they can join," said Dickerson. They have to march slowly around the campus with heavy torches held straight out from the body.

"While the pledgees are slowly walking around the campus, the 'fellas' are badgering them, trying to break down their will power."

This scene was Dickerson's greatest lighting challenge. "It takes place over a large section of campus at night and we had to set up a moon rig to give us adequate lighting. My gaffer, Larry Banks, worked out the preliminary plans which were finally put together by my key grip, Tod MacNichol. It consisted of six Maxibrutes set in a frame that could take gels and diffusion. It was suspended 60 to 70 feet in the air by an industrial crane. It gave us 18 foot candles of light at a quarter mile radius.

"In addition, Wynn Thomas designed double-wick torches that I could use as another light source. They gave about 16 foot candles worth of light when held at arms length, as well as gave a very good flickering light effect on the actors faces," he continued, adding that little supplemental light was used during the three nights of shooting this scene.

The way this scene was shot also reflects the pragmatic way Lee, Dickerson and Thomas work together. They had in-depth script conferences before production started, going over the script page by page. "Although we did our own storyboards we didn't follow them religiously. A lot of times we left our options open. Spike has a tendency to go in knowing exactly

WHEN YOU'VE REACHED THE STAGE WHERE NO OTHER EQUIPMENT WILL DO.



Renting equipment in New York can often be a dramatic experience. So we at TCS have decided to make things easy for you.

We rent the highest standard of equipment possible, serving all your production needs.

And because we're a smaller-sized company, we're not too big to deliver friendly, knowledgeable and personalized service. On time. And within your budget.

Our latest line includes:

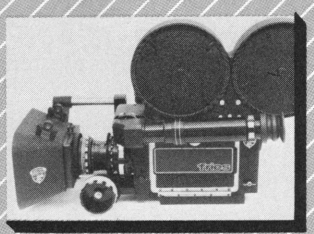
ARRI BL 4 • ARRI 35 III-130 • ZEISS, ANGENIEUX & COOKE LENSES • SACHTLER TRIPODS

So when you're tired of the big, impersonal renting arena, rely on TCS. You'll steal the show.

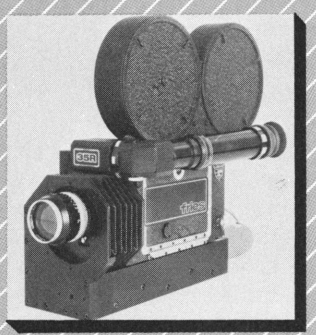
technological cinevideo services, inc. 630 NINTH AVENUE • 10TH FLOOR • NEW YORK, N.Y. 10036

SALES • RENTAL • SERVICE *212-247-6517*

MODERNIZED EQUIPMENT FOR MODERNISTIC FILMAKERS



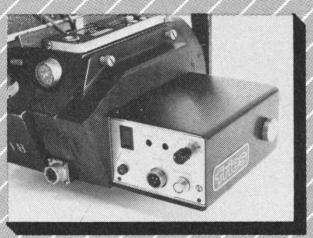
35R Beamsplitter reflex conversion to the Mitchell Std./ High Speed camera. Features include interchangeable lensmounts, film clip viewing, orientable viewfinder, video assist, high-speed/crystal/ single-frame motor.



AF35R Follow focus beamsplitter reflex conversion to the Mitchell Std./High Speed camera for computerized motion control. Features include 4" bellows focus travel, lead screw drive, internal capping shutter, choice of lensmounts, orientable viewfinder, film clip viewing, video assist, and high speed/ crystal/single frame motors.



35R3 Rotary mirror reflex conversion to the Mitchell Std./ High Speed camera. Features include interchangeable Arri, BNC-R and Nikon lensmounts, orientable viewfinder, video assist, and a high-speed/crystal motor.



120M2 is an "all-in-one" motor for the Mitchell S35R/Mark II. Features include 4 to 120 FPS, crystal 24/25 or 24/30 FPS, forward and reverse, auto mirror positioning, remote single-frame, intervalometer, strobe triggering and TV sync.

MOTION CONTROL
HIGH SPEED
INSERTS
TIME LAPSE
SPECIAL EFFECTS
VIDEO ASSIST

Fries Engineering Inc. 12032 Vose Street, North Hollywood, California 91605 Phone (818) 765-3600 Telex 4720922

fries Engineering

Broaden Your Horizons

with F/VESCO's Wide Eye I&II



Versatile, low-cost, lightweight, wide-angle lens attachments for your ENG/EFP video zoom lenses.

- Front-mounted Wide Eye I & II readily convert most video zoom lenses into ultra wide-angle fixed focal-length lenses with no loss in light transmittance.
- Made of high-quality optical glass with multiple high-efficiency anti-reflective coatings.
- Wide Eye I increases the widest angle of the zoom lens by about 35% with minimal distortion. Wide Eye II increases it by about 50% to create dramatic "fish eye" effects.

  For example, Wide Eye I converts the widest angle in Fujinon 9-126mm and Canon 9-117mm zoom lenses into an effective fixed focal length of 5.7mm; Wide Eye II converts it into 4.6mm.
- Easily attached to most professional ENG/EFP zoom lenses which feature macro and/or adjustable back-focusing capabilities.
- Ruggedly constructed. Wide Eye I & II are supplied in black anodized ring mounts.
- Supplied with heavy-duty, padded carrying pouches featuring convenient Velcro closure and belt loops.
- Available in either slip-on (with screw-lock) or threaded screw-in models.

Rental • Sales • Service

Film/Video Equipment Service Co.

72 1875 So. Pearl St. · Denver, CO 80210 · (303) 778-8616

what he wants, he edits in his head," said Dickerson.

During the Death March scene most of the actors improvised. "A lot of things came out that weren't scripted. We'd see something and say, 'Let's try and get that,'" said Dickerson, "and we'd return and shoot it later."

Dickerson feels the script analysis and pre-production phases are pivotal to a film's overall look and outcome. "Each individual script has its own personality, feelings and textures. A film's style is a very personal thing which should come out of that particular script. Translating that into concrete visuals is a search that the director, cinematographer and production designer undertake together.

"Our journey with *School Daze* began upon reading the script, but it gained a real momentum when we attended an actual homecoming celebration at the school where we were planning to shoot," he said.

"Part of our plan was to photograph the homecoming parade and football game as a kind of pre-production second unit. However, we got more out of it than spectacular footage: we experienced firsthand the moods and energies we would have to recreate for the screen. There was so much energy in the stands at the football game that when it became obvious the home team was losing, people forgot about the game and started partying among themselves. Losing the game wasn't going to stop their homecoming celebrations.

"Also, since the real game was being played between mine and Spike's old schools, and my school was winning, a new dimension was added to the cameraman/director relationship," he joked.

The football game also influenced Dickerson's decision about the overall look for the film. "The stadium became a colorful mass of people of all colors, dancing and singing in unison as if they were one entity. It was bright and sunny, and the myriad colors reminded me of the Kodachrome look," he said.

A similar approach was taken with the football scene where the 500 extras had to be made to look like a crowd of 5,000. "This was all we could get because several other films were being made in Atlanta at the same time, and most of them could pay the extras more money," he said.

"We shot the crowds from the stands and then shot Ossie Davis who plays the coach. After shooting him from the side lines, his face was so expressive Spike felt that there was no need to photograph the game at all so he cancelled it," said Dickerson.

However, other scenes, like the stage show that culminates in the crowning of the homecoming queen, were orchestrated beforehand. "We had a very big theater space and Spike wanted to take full advantage of it. Because the dance, The Sun is Rising, goes through a series of mood changes, from night with the moon, to a storm and then sunrise, I designed a series of flat circular portals that iris out like an eye. The flats begin as a small circle representing the moon and open out to represent sunrise," said Thomas.

Keeping within schedule and budget with so many different types of sets to create, as well as handling both the crowd and the more intimate scenes, indicates the level of collaboration between all the members of the team. Lee, Dickerson and Thomas had nothing but praise for each other and their crews.

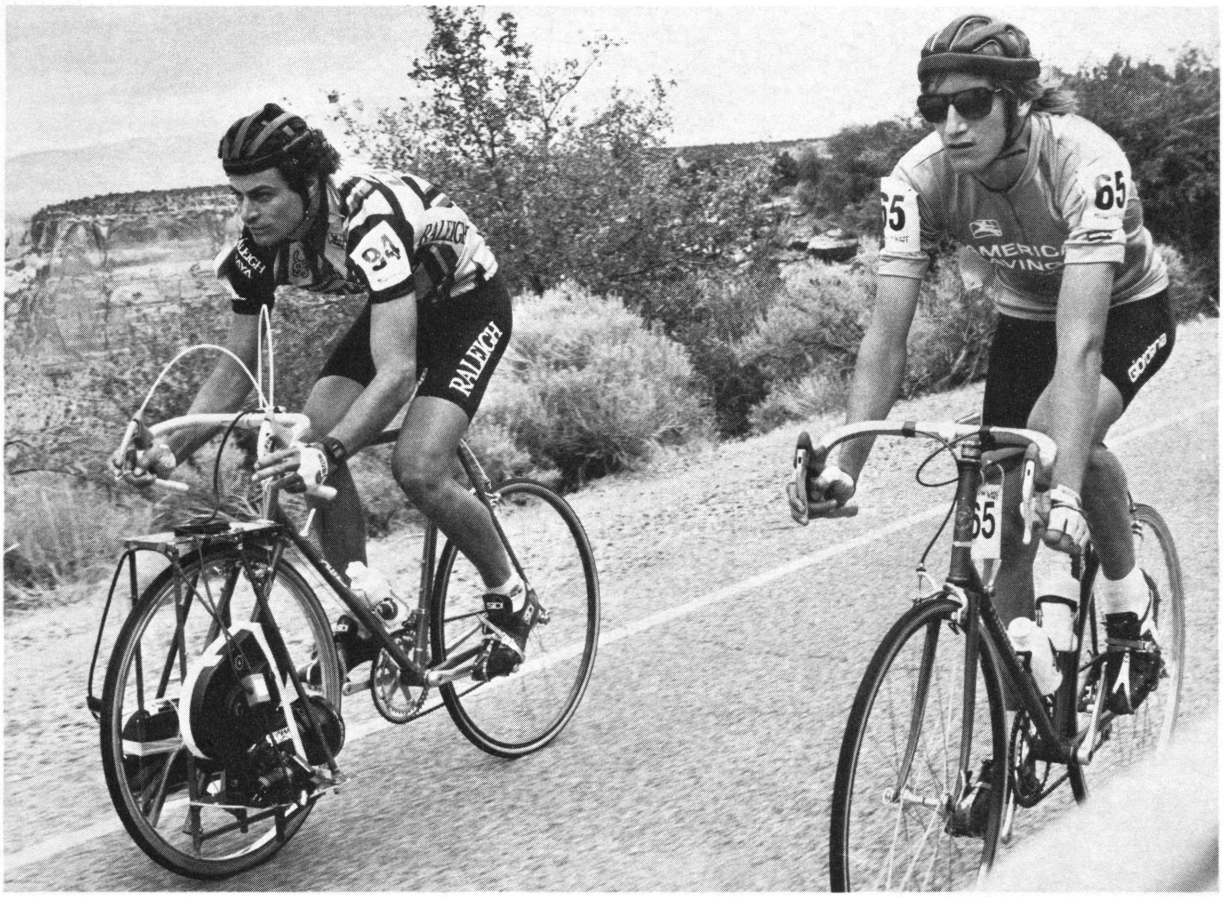
"Wynn was an invaluable collaborator. He really understands a cinematographer's needs and responds to them. His set designs always took into account possible ways for me to light them, and when I told him I wanted our day interiors lit by sunlight or daylight through windows, he took this into account when scouting locations," said Dickerson.

Lee said about Dickerson: "Ernie has to be given credit for a large part of the visuals. His visual sense is highly developed, I'm better with dialogue, but through Ernie I'm improving." △

The author is a free lance writer based in New York.

Bikes! Camera! Action!

by Ron Magid

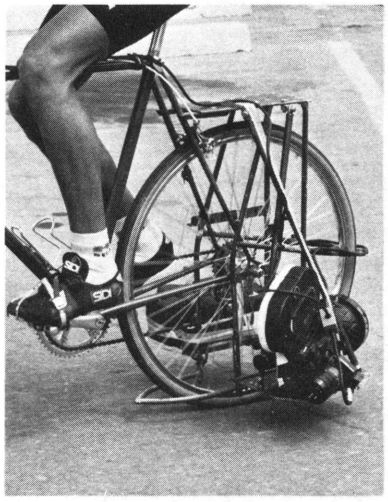


Denman demonstrates equipment uses at various locations on his bicycle.

To many cinematographers, having a dolly that would allow a camera to travel at high speeds through narrow, confined spaces would seem a dream come true – but to Rick Denman, owner and founder of Bikes... Camera...Action!, it's merely his stock in trade. Denman's specialty for the past eight years has been finding ways to mount almost any type of camera onto various bicycles to create what he calls "the world's narrowest non-polluting dolly." His unique work has appeared in some three dozen commercials, the IMAX film, *Speed,* and two features, *American Flyers* and *Quicksilver,* both of which deal with cycling. Having proven time and again the advantages of utilizing his services to enhance bike racing footage in both live and staged situations, Denman is now on a self-proclaimed mission to acquaint cinematographers with other applications for which he feels certain his equipment could be used.

"I'm much more maneuverable at a higher rate of speed on a bike than any other camera dolly, inserted car, motorcycle or Steadicam," Denman says proudly. "There are many situations where these other methods are impractical: you can't put a motorcycle or an insert car in the midst of a marathon footrace, and you can't always use a Steadicam because of the speed and distance involved. The maneuverability of the bicycle and its ability to lean into a turn on a fast descent is unique and gives a greater feeling of momentum than can be achieved with an insert car.

"A bicycle is very unthreatening, so I can chase people around who are riding skateboards, scooters, even wheelchairs. On the other hand, I don't think anyone would want to have a motorcycle riding in the midst of a pack of skaters or runners, simply because it's going to cough up an awful lot of smoke. Motorcycles are also a



poor choice in racing competition situations because they create wind draft, which is the basis of every tactic in bike racing because it's such an advantage. If I'm out there with a

SALES/SERVICE/RENTAL

- Dealer for most major companies including ARRIFLEX
- Full line of expendables
- Buy/Sell/Trade Used Equipment
- Motion Picture Equipment Service/Sales/Rental

AATON
ANGENIEUX
REPAIRS
(ARRI, ECLAIR, BEAULIEU, BOLEX Etc.)

- Factory trained by AATON and ANGENIEUX in France
- 20 yrs experience in motion picture field
- Servicing all major motion picture equipment

SMS PRODUCTIONS, INC.
445 W. Erie Street Unit 103
Chicago, IL 60610 312-664-3752

LIGHT WAVE
Zeppelin®



WINDSCREEN AND SHOCKMOUNT

The Zeppelin® Wind Screen insures perfect sound recording in all conditions where wind or air movement is present. Its aero-dynamic design screens the microphone from wind but allows sound in. Although extremely lightweight, the Zeppelin is virtually indestructible and can be boom mounted or hand held with the Independent Suspension Shock Mount. There are Zeppelins available to house Sennheiser 816 and 416, AKG CK-8 and CK-9 and other similar microphones. Zeppelins and shock mounts are all-American made.

ALAN GORDON ENTERPRISES, INC.
1430 Cahuenga Blvd., Hollywood, CA 90078
Telephone (213) 466-3561 • (818) 985-5500
TWX: 910-321-4526 • Cable: GORDENT

camera on my bike, however, I'm really not going to be giving off any more wind draft than any other bicycle out in the pack."

In the film, *Quicksilver,* Denman demonstrated exactly the type of maneuvers he could execute with bike-mounted cameras, and produced some breathtaking footage as his bike wove in and out of heavy downtown traffic. Although in the context of this particular film the idea was to portray a rider's point of view as he raced through hazardous street situations, Denman feels confident that the same approach could be used with equal success in a footchase situation, for example, through densely packed city streets and narrow alleys.

When Denman first conceived of the idea of mounting a camera to various parts of a bicycle, he contacted Mike Slawta of Landshark bicycles to implement the designs he envisioned. The result was a completely customized lightweight frame that could sport some half a dozen different mounts, most of which lend themselves very well to shooting other action besides that specifically related to cycling. In the rear of the bike, cameras could be mounted either over the wheel, or at any point along either the left or right side, as low as only a few inches above the ground. If the cameras were mounted facing away from the rider, the bike would function as a perfect reverse tracking dolly. Cameras can also be placed on an extended mount either to the left or right of the rear tire in order to film action not directly in the plane of the cycle itself. The camera can also be mounted on the front fork of the bike for forward tracking shots.

For the purposes of capturing cycling action, Denman has a variety of camera mounts that focus on specific areas of the bike. A camera mounted on the top tube can shoot forward through the handlebars or back towards the seat. By mounting a camera facing forward along the left or right side of the rear tire, shots of the rider's feet peddling can be obtained. Perhaps Denman's most unusual mount is something he calls "The Wing," a device designed to shoot down through the rear wheel. It's basically designed to focus down on the action of the derailer, which is what derails the chain for shifting gears.

"I have two more mounts for shooting things like the front derailer and through the rider's legs," Denman adds. "Most of my mounts are on the right side because that's the side that seems to interest people the most, since the chain ring is on that side. I also have another mount facing toward the rear which looks down on the action of the legs pumping, and a tilt-up plate above the front wheel for shooting the face of the rider. There's virtually no angle I can't get on a bike with these mounts."

There's also virtually no camera Denman hasn't experimented with, either, and he's produced excellent footage using everything from a lightweight Betacam to a cumbersome IMAX camera. "The smallest professional camera I've mounted on my bike, besides home video cameras, is the Eyemo. It's not difficult to use at all, because it's about half the size of a freestanding mailbox. Of course my rigs can certainly handle much heavier equipment, like a Panaflex X with a full mattebox and a spherical lens, which is the largest camera I've mounted on my bike – it probably weighed fifty pounds. I couldn't actually mount the IMAX camera onto my bike. It weighed something like seventy pounds, so it was nearly four times as heavy as the bike that was to carry it. We arranged for a trailer mechanism to pull the camera behind the bike instead. The standard camera I've used to shoot almost everything I've done in 35mm is the Arriflex 2C, which we can keep to a weight of 20-25 pounds for the camera and lenses."

Weight can be an important factor in Denman's line of work, so he has continued to make improvements in both the designs of his mounts and his riding ability in order to handle whatever demands may be made of himself and his equipment. "For example," he explains, "the front fork mount actually replaces the front fork of the bike, and is adjustable to different wheelbases. It has five different notches where it attaches to the hub of the front wheel, so I can adjust the wheelbase depending on how much rake I wanted in the fork, which would be determined by such factors as the weight and center of gravity of the camera, and how I wanted the bike to handle: quick and responsive or laid back.

"For situations where I have the camera extended out over the right or left side, I find that having the capability of moving the wheel either farther forward or backward to better match the camera's center of mass makes the bike steer easier. I used counterweights on *American Flyers,* but I've since found that if I don't have anything to put over there, I don't need it. It does take an awful lot of getting used to in order to be able to ride with that kind of off-center weight, but now that I'm accustomed

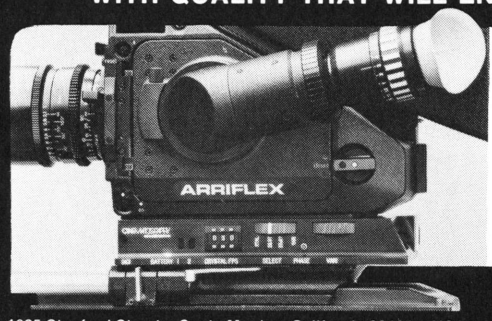
to it, I can put an entire Sony Betacam – which weighs about twenty-five pounds – on one side of the bike very close to the ground and ride it just like that – I can handle that sort of thing well enough so I don't have a problem."

Denman's camera operating skills have become even sharper now that he has to handle a new panning mechanism he's added to his standard repertory. He was assisted in the creation of this exciting piece of equipment by Ken Robings of Clairmont Camera. "We've worked on numerous projects together," Denman says, "Fortunately for me, he's taken an interest in bicycle riding and racing. The pan mechanism consists of a flat aluminum base which can bolt to any of my existing camera mounts, and there's a battery pack and a cable leading from the head to a microswitch joystick which is just taped to the handlebars. It's calibrated so the harder you push it, the quicker the pan, and there's also a variable speed switch on the battery pack. It uses a high torque motor that's very steady and smooth.

"This new mechanism, along with my mounts, allows you to shoot a bike race in ways that have never been seen in the coverage before. Up until now, there's only been a limited number of camera angles. Using a small video camera and the pan mechanism there's no reason there can't be a direct audio/video hookup to the director. Generally, there are some very long takes in most bike race coverage, so I really think this would cut in nicely."

Despite his equipment's obvious bicycle-oriented applications, Denman again stresses the untapped potential his uniquely fast and narrow "dolly" might afford the inventive cinematographer. "I've experimented with my mounts versus a helmet mounted camera and the bicycle came out amazingly steady even over trails with hoofprints in dried mud. I often ride through terrain similar to that in the speeder bike chase sequence in *Return Of The Jedi* – I could simulate that sort of point of view through dense foliage as long as there's some sort of path to ride through. Anywhere a mountain bike can go, I can film, and my mounts are adaptable to any sort of cycle." △

CRYSTAL HIGH SPEED CONTROL
WITH QUALITY THAT WILL ENHANCE YOUR ARRI-3



- 132 CRYSTAL SPEEDS
- 1 fps — 130 fps
- 29.97 & 23.976 fps
- PHASE SHIFTING BUTTON
- PRESETABLE SPEEDS
- 2 BATTERY MONITORS
- LED TACH
- LED METERS/FEET
- 2 ACCESSORY CONNECTORS
- MACHINED ALUMINUM
- REPLACES RISER BLOCK
- SMOOTH SPEED RAMP

1625 Stanford Street • Santa Monica, California 90404 • USA
Phone (213) 829-1811

CINEMATOGRAPHY electronics

REDIROOF - Come Rain or Shine

Rediroof is the versatile weatherproof canopy you'll want to take to every location. Use it as a sheltered shooting position, or for wardrobe, catering, storage, etc., etc.

Rediroof can be set up in under a minute, and links together for large sheltered areas.

Sizes 7 x 10, 10 x 10, 10 x 20.

Please contact OpTex for full details.

OpTex



OpTex, 22-26 Victoria Road, New Barnet, Herts. EN4 9PF. UK
Tel: 01-441 2199 Telex: 8955869 OpTex G Fax: 01-449 3646

SUMMER WORKSHOPS

The Leader in Professional Training Programs

One-Week Master Classes

Directors Workshop
Script Writing Workshops
Film Directors Master Class
Film Directing Workshop
Acting for Directors
Film Acting Workshop
Editing The Feature Film
Production Mgrs./Assistant Directors Workshop
Sound Recording
The Camera Workshop
Lighting & Cinematography
Steadicam Workshop
Corporate Video Production
Electronic Cinematography
Video Lighting Workshop
Video Editing Workshop
TV Commercial Workshop
TV Hard News Workshop
TV News Feature Workshop

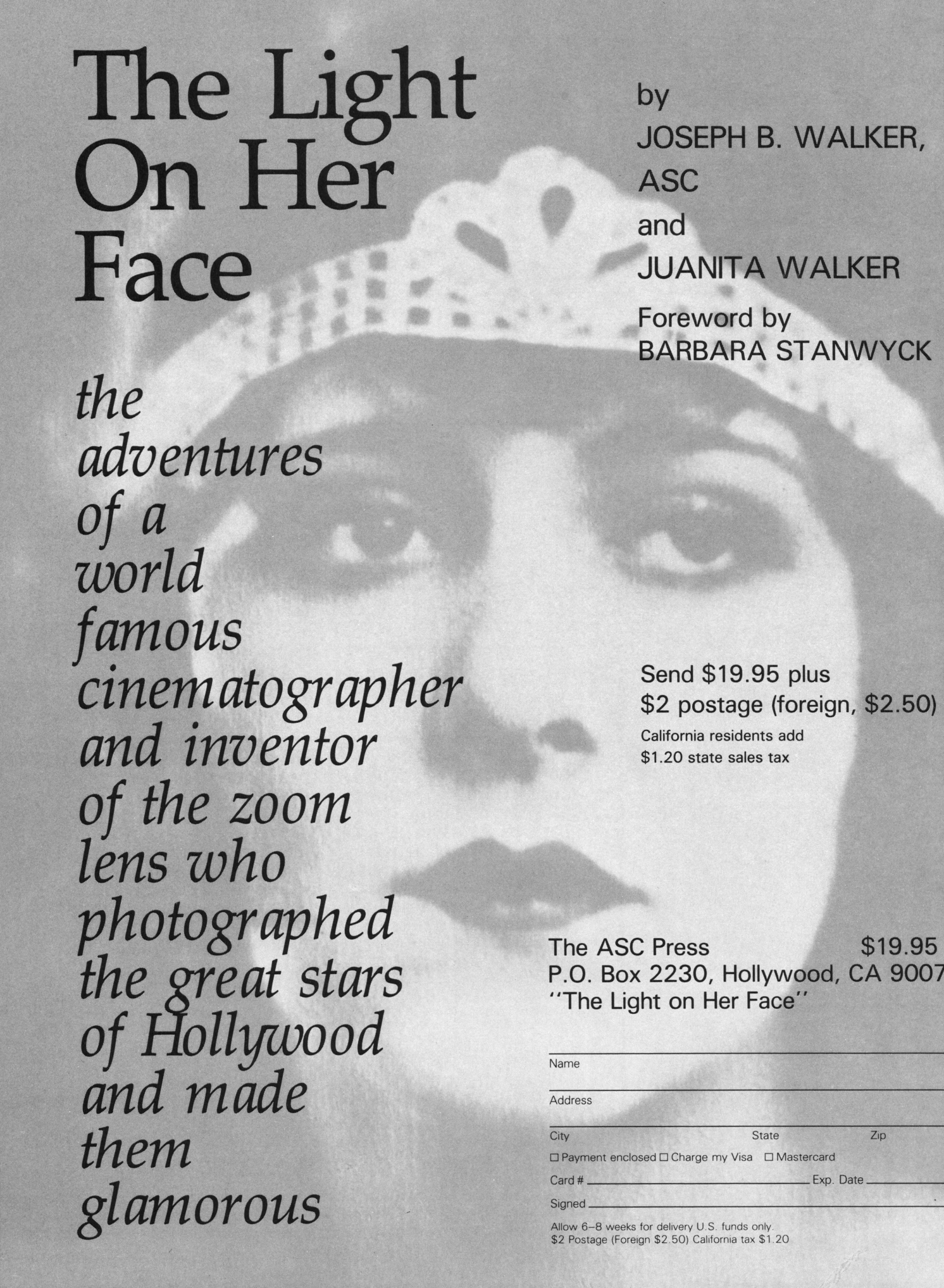
Great wrap parties with lobster!

The Workshops offer one and two week professional classes each Summer in Rockport, Maine. These are taught by the industry's leading directors, craftsmen, cinematographers, cameraoperators, actors, and producers - many who have won Oscars. Courses run June 1 through August 15, 1988.

Write or call for your free copy of our 40-page catalogue

The Maine Film & Television
WORKSHOPS
Rockport, ME 04856 (207) 236-8581

These programs supported by **ARRIFLEX**, **KODAK**, **Panavision** - Additional support from Cinema Products, ROSCO, Tiffen, OSRAM, Lowel, Matthews, Sachtler, O'Connor, and Panther



The Light On Her Face

by
JOSEPH B. WALKER, ASC
and
JUANITA WALKER

Foreword by
BARBARA STANWYCK

the adventures of a world famous cinematographer and inventor of the zoom lens who photographed the great stars of Hollywood and made them glamorous

Send $19.95 plus
$2 postage (foreign, $2.50)
California residents add
$1.20 state sales tax

The ASC Press $19.95
P.O. Box 2230, Hollywood, CA 9007
"The Light on Her Face"

Name

Address

City State Zip

☐ Payment enclosed ☐ Charge my Visa ☐ Mastercard

Card # Exp. Date

Signed

Allow 6–8 weeks for delivery U.S. funds only.
$2 Postage (Foreign $2.50) California tax $1.20

Cancelled *Max Headroom* Leaves Legacy

by Bob Fisher

There's a scene in one episode of *Max Headroom* where Theora Jones (played by Amanda Pays) confronts a Network 23 executive in his posh office. She's angry. He's bemused. The camera dollies from a two-shot to a position behind Theora where it sees the situation from her perspective. The executive nearly fills the frame, and the suggestion of menace hardens as he advances toward Theora.

The cast and crew are shooting in the lobby of a once elegant Los Angeles movie theater. The fading ornate splendor provides a perfect setting for the executive's office. Director of photography Paul Goldsmith is crouching just off frame waving a long fluorescent tube in front of the actor.

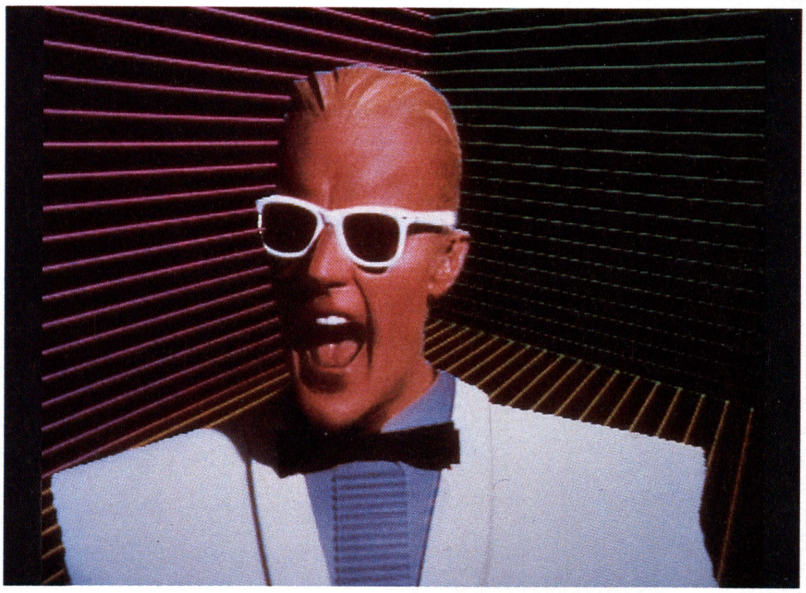
It's a soft light, just a little cooler than daylight. The low angle paints sinister shadows under the actor's eyes. The cool light gives him an icy pallor in contrast to the warm scene.

Suddenly, Edison Carter (played by Matt Frewer) bursts into the office with his live minicam in-hand. He pumps rapid fire questions at the startled executive, whose live video image is seen on the TV screen making a stuttering reply. The U.S. cavalry probably never had a better-timed or more successful charge.

Max Headroom (due to the vagaries of television, no longer on the air) breaks all the rules with its integrated computer graphics, hip humor, rich 30-frames per second images, quick cuts, punchy music and interpretive cinematography.

Three-quarter-inch video tape and 35mm Eastman color negative film are intercut freely, which provides an interesting juxtaposition of hard reality and dream-like fantasy.

"The nature of the project is innovative," said Goldsmith. "Story production, design, graphics and editing are all intertwined with the cinematography to achieve the look. It's a collaborative effort. There are times when a director of photography can more or less stand alone. But even an egomaniac wouldn't dare to try that here."



Max Headroom was born in London, in 1982, when Peter Wagg, a 33-year-old record company executive was asked to develop a concept for an MTV-type series for Channel 4. Max was originally an electronic age talk show host. Cinemax brought the program to U.S. cable.

Next, came the stunning success of the Max commercials for "New Coke" for Coca Cola, and finally during the Fall of 1986, ABC television gave Wagg and Lorimar Television the okay to develop six episodes.

The story takes place "20 minutes in the future" in a post-industrial revolution world that looks something like the one in Ridley Scott's *Blade Runner.* Thousands of satellites circle the Earth beaming live images to televiewers. Advertisers aren't averse to sending subliminal messages which have an occasional side effect of sizzling a viewer's brains.

Broadcasters vying for viewers stage a deadly game of Rakers, which makes *Rollerball* look like Little League. The players are teenagers on motorized skateboards. They are armed with razor-sharp talons which they slice at their opponents as they speed by. Carter is an investigative reporter for Network 23. Theora Jones is his controller. She has fingertip access to massive data banks, and guides Carter into and out of harm's way.

The first episode is an adaptation of the script which launched Max on Channel 4 and Cinemax. Carter is caught in the act of discovering an ugly truth about Network 23, but guided by Jones, he escapes on his motorcycle…nearly.

Carter's last obstacle is a gate in the garage parking lot of the network building. He heads his speeding cycle right for the gate. Just when you think he's home free, there's a maximum headroom crash barrier at the gate. Carter literally hits the barrier and the last thing he sees is "Max Headroom 2.3M!"

But, all is not lost. Bryce (played by Chris Young), the network's 16-year-old head of research and development, is able to copy Edison's mind and regenerate his image as a computerized talking head. And so Max is born.

Technically, Max is described as a self-contained ROM (read-only memory) constructed with an isometric optical microlink. He has Carter's memory and psyche, and a charming stutter, the fault of a minor software glitch. Talk about head and shoulder shots – that's all Max has to offer.





Above: ***Edison Carter (Max Brewer) talks with head of network on screen.***
Right: ***Theora Jones (Amanda Pays) at computer controls.***

Max is a wild card. He gets loose into the memory of the network's computer, and pops up where and when he chooses, dishing out a menu of delicious irreverence that viewers love to devour.

One of the key behind-the-scenes players is Matthew Knox, vice president, network post-production for Lorimar-Television. Knox was born in England but he has family roots in the U.S. film industry. He studied at the London Film School and worked in England for awhile before coming to the U.S. during the early 1970s. Knox started at Lorimar as an apprentice in the post-production department in 1974. Today, he's responsible for all post-production for episodic network TV *(Falcon Crest, Our House, Dallas, Knot's Landing,* et al) as well as for network pilots, telefilms and mini-series.

Lorimar was among the first film producers to lead a large scale charge into video post-production. The trend started around July of 1985, and now just about all the TV film shot at Lorimar is transferred directly from the original negative to video tape for post-production.

Lorimar operates two Rank-Cintel color telecines of its own, and is currently using the Ediflex off-line video editing system. "We do about 80 percent of our own film-to-video transfer work," said Knox. "The biggest benefit is reduction of post-production time."

The Max project presented an evident technical challenge. Numerous scenes involve footage encompassing video monitors. There are some 40 monitors in the control room of the Edison Carter Show at Network 23. And, Edison Carter is almost always seen with his camera recording live news images. These are frequently integrated into scenes; and, of course, Max's persona is always presented on a TV monitor.

Traditionally, film cameras roll at 24 frames per second, while NTSC video images are displayed at 30 frames per second. The result is that if you shoot film at traditional frame rates, the images on the video displays will flicker and roll in bar-like fashion.

There are various remedies, but the most practical is to run the film camera at 30 frames per second. This eliminates the problem, and it also enriches the quality of visual information. In effect, the TV viewer is treated to 25 percent more pictures per second. This technique is occasionally used by commercial and rock video filmmakers.

Knox suggested that the cost for shooting at 30 frames per second could be off-set by pulling down three perforations per 35mm frame instead of the standard Academy aperture of four perforations per frame.

This reduced the amount of footage running through the camera by 25 percent. Knox projected the net cost savings for shooting at 30 frames per second with a three perforation pulldown at around six percent.

There is about a seven percent loss in image area, and some slight loss of exposure. However, these were deemed acceptable compromises. Knox consulted with Moe Shore at Panavision, John Baptista at Metrocolor Lab and Niel Kempf at Rank-Cintel. In each case he was assured that camera, lab and telecine transfer equipment could be modified to operate at three perforations per 35mm frame. There were also some concerns about image steadiness since all 35mm film emulsions are designed for the Academy standard of four perforations per 35mm frame.

Various emulsions were tested in a Panaflex Gold camera modified for a three perforation pulldown. Eastman's medium and high speed emulsions (5247 and 5294) met the test.

Testing was completed by January (1987), and production began shortly thereafter. The unique visual language of the series evolved during the first six episodes and was based on the English original. During the pilot episode, graphics created for the Channel 4 program were used and augmented by the Post Group and Video Image, in Los Angeles. For following episodes, more original graphics were created.

Pacing has a lot to do with the *Max* look. "We are doing our best to blow the editing system out," said Knox. *"Max* is a visually-layered show with a rich complement of sound. We are creating a look and a sound for a future which no one has ever described before."

Bruno George was associate producer for the six episodes created during the spring of 1987. "We forced a breakdown of the territorial attitude between film and tape people. You've got to embrace the strengths of both types of media or the show doesn't work. We use both film and tape aesthetics. They're different. It's like mixing oil painting and sculpturing. You can't fit one into the other's slot. We are also using our telecine transfers as dailies and answer prints simultaneously. If you don't do that, the end product suffers," he said.

Max is something George has been working toward since his teenage years. George grew up in Eugene, Oregon, where his father worked for a local TV station. He started dabbling with computer animation in high school, and hoarded his allowance so he could pay a local lab to process his film. In Hollywood, George worked in a film lab, and later in the optical department at BOSS Films, when that company created visual effects for *Ghostbusters* and *2010.*

"I learned a lot about the structure of film during that period," he said. "We took individual frames apart by making separations, and, in effect, we relit these to achieve particular effects, before we put them back together."

George describes the *Max Headroom* look as rock-and-roll rather than MTV style rock video. "We wanted to

create a feeling of danger, and a sense of urgency," he said. "We wanted to avoid being slick. We wanted a fullness and a lushness that overloads the viewers' perceptions. I believe that we are being faithful to the original photography and the concept created in the original film."

Transfers were made at Compact Video, where a Rank-Cintel telecine had been modified for 3-perf pulldown. "They also assign the same telecine operator to every episode, and that's essential," said Knox. "Ed Rowan is in sync with Paul Goldsmith and what we are trying to achieve in color correction."

How important is the 30 frame per second aesthetic?

"It's like picking colors off a palette," George answered. "Which do you prefer in a given situation, 24 frames per second or 30? Each has its own texture. What's really important is the story and the performances. Without that, you could shoot 65mm color negative at 60 frames per second and it wouldn't matter."

Knox added: "We wanted a film look with film grain. If not for the integration of TV monitors in so many scenes, we probably would have shot at 24 frames per second. There are sequences that we shot at 24, 48 and 64 frames per second to achieve certain effects. In those cases, we were using a camera with a four perforation pulldown. However, since the spring, Panavision has introduced variable speed cameras in a three-perf format."

One of the logistical problems was finding material to display on the many television monitors, especially in the control room. "We've stretched the public domain to its outer limits," said Knox. "We are using footage from travelogues, game shows, and we are creating new footage."

Larina Adamson, associate producer, says that the layering of film, video and computer graphics images with music has become increasingly more elegant. Wagg selected Adamson to create/oversee the production and integration of graphics, video effects and sound design, starting with the first episode of the second season.

"When you see the pictures and hear the sounds, it all becomes one," she said. "That's a large part of what I was brought on board to accomplish. We have been progressively executing more Channel 23 programming inside the context of the show."

There's one Zik Zak commercial in an episode called "Neurostim" which advertises a free bracelet. Buy a Zik Zak hamburger and you get a free bracelet. What the commercial doesn't tell viewers is that when you put the bracelet on your wrist, a tiny needle pricks your skin, and chemical urges to buy Zik Zak products are continuously sent to your brain. It also causes the receiver of the chemical message to fantasize.

In "Dream Thieves" Edison Carter's dreams become phantom images. "It's like creating an image with tracing paper," Adamson said. "You draw part of the image on one layer, and then you add another layer, and another, until the composite is a totally unique image. We mixed video, computer-generated graphics and film images, and altered the projection speeds, making them faster and slower, to create a unique texture. Layer that with sound, and it becomes something which you haven't seen or heard on television before."

We are introduced to a new sport, Scumball, and an extraordinary event, the Scum Bowl. The history of this event is described by a sportscaster, liberally punctuated with film harvested from stock footage libraries. There's even a trophy specially created for the winner of the Scum Bowl Final.

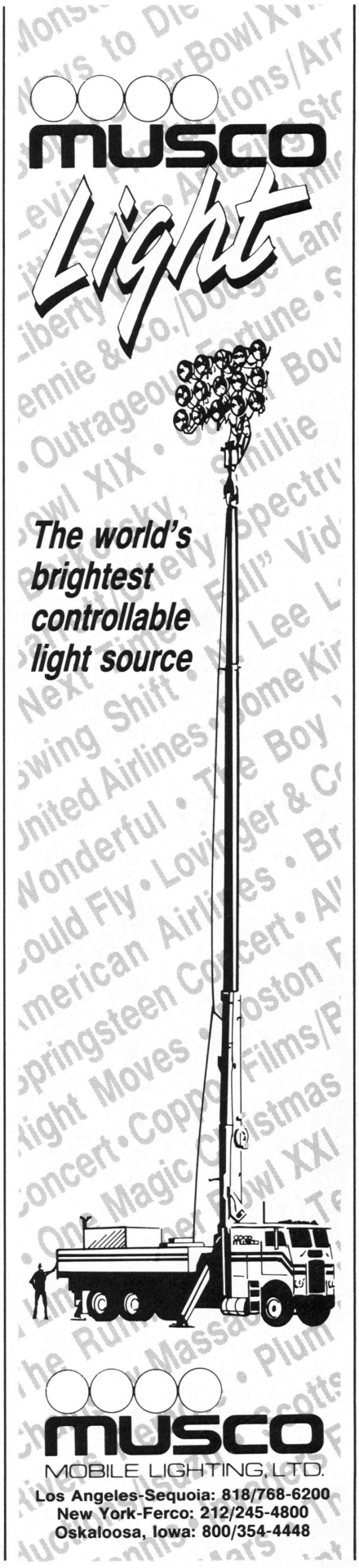
This sequence involves use of Ultimatte to create an electronic composite merging the video images of the sportscaster with the Scumball Bowl logo and trophy.

"Peter Wagg is the guy, the driving force behind all of this," Adamson said. "He's given us the freedom to use our imaginations, but he sees and approves everything. He personally selected everyone working on this show. Everything that we do must meet his standards, and that's a very difficult thing to accomplish."

Adamson describes herself as a child of the video age. Born in Los Angeles, she was an enthusiastic amateur photographer as a teenager. "I took pictures, entered festivals and signed up for art classes," she said.

Then she entered USC, intending to become a social worker. During her senior year, Adamson shifted her major to broadcast communications. After graduation, she worked as a radio and TV time buyer for an ad agency before switching to ABC Television where she worked in the promotion department.

"That's where I learned the mechanics and aesthetics of video," she said. Adamson created the promo spots and main title for *Max* last season. That's where



Century 9.8mm Kinoptik Revitalization.



Century's extensive modification makes existing 9.8mm, T2.2 Kinoptik 35mm lenses fully compatible with today's cameras and accessories.

Extensive Evaluation & Optical Care ❑ New Focusing Mount & Aluminum Housing ❑ Focuses to 1" ❑ Integral Follow Focus Gear ❑ Large, Clear Engravings ❑ Choice of mounts: Arri PL or BNCR (stainless steel). **❑ Utilize Existing Accessories: Retains original front diameter. ❑ Accepts 2x2" Glass Filters ❑ Optional .7X Wide Angle attachment converts lens to 6.8mm.**

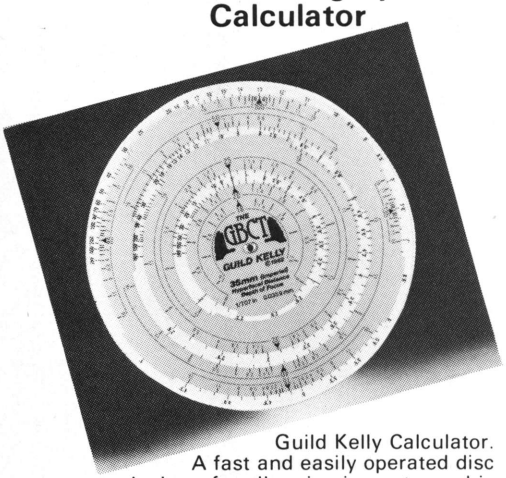
Call Jeff Giordano for details.

Century precision optics
A DIVISION OF CENTURY PRECISION INDUSTRIES, INC

10713 Burbank Bl., N. Hollywood, CA 91601 Ph: (818)766-3715
FAX: (818)805-9865 TLX: 066-2419 CENTOPTICS LSA

GUILD KELLY

The Cinematographers Calculator



Guild Kelly Calculator.
A fast and easily operated disc calculator for all main cinematographic calculations. Available in 35mm, 16mm, Imperial and metric versions. Fits neatly in the pocket. For cinematographers, TV camera-persons and all technicians concerned with film or TV production.

Available from:
BIRNS & SAWYER INC
1026 N Highland Avenue
Hollywood California 90038
U.S.A.

JOE DUNTON CAMERAS AMERICA INC
1223 North 23rd Street, Wilmington
North Carolina 28405
U.S.A.

All major credit cards accepted.

Wagg discovered her, and decided to bring her on board.

That brings us to Goldsmith, who joined the team in time to shoot the third episode. Bob Stevens shot the pilot and second episode. Goldsmith grew up in New York's Greenwich Village. While he was still in high school, Goldsmith was touring Europe on a motorcycle during a summer vacation, when he landed a job with a documentary film crew.

"They were shooting a documentary about the Grand Prix," he recalled. "I did everything. I carried tripods and fetched sandwiches. I even took a couple of shots."

After NYU Film School, Goldsmith shot mostly hand held *cinema verité* documentaries. He moved to Los Angeles to become a partner in TVTV, the preeminent video documentary group of the seventies, a movement known as guerrilla television. "One of the appeals to me of the Max show is its involvement with aspects of the culture that we explored at TVTV, particularly how TV actively affects society and not just mirrors it, for instance, media-genic politicians, TV religion, new journalism and news as entertainment."

After TVTV disbanded, he returned to film documentaries. There were two trips to China – one for a National Geographic special, the other with WHAM which was the first rock tour in China. He also did *Lifeline,* a prime time documentary series (Doctor Doc.), Middletown for PBS and a lot of rock videos, including Renaldo and Clara, a feature for Bob Dylan.

His entry to Hollywood started with a phone call from Haskell Wexler, ASC. "He asked me to work for him as second camera on some Wells Fargo commercials. We went out for 10 days in order to return with three 30-second shots to run uncut. Without script, actors or a product, it was a purely filmic experience." For two years he worked with Wexler on various projects. "It was ideal. Whatever we shot, I knew Haskell had it covered, so I could experiment. Frequently Haskell's instructions were 'Surprise me.' He was very generous with his knowledge."

Goldsmith shot many rock videos during this period. Then in 1986, Michael Chapman, another eminent cinematographer, brought Goldsmith into studio work to shoot *The Annihilator,* a made-for-TV movie he was directing. This led to more TV movies, an episode of *Crime Story,* second unit on *Lost Boys,* an independent feature (Killing Time [New World]) and finally *Max.*

Goldsmith defined the *Max* look: "We want the freedom of rock video with the feeling of a big feature," he explained. "There's no logic or dogma for how things should look. We just do it and if it looks vaguely like *Blade Runner* it must be right."

"We use a lot of color and very little white light. Our units are rarely tungsten, usually either HMI Pars, Xenons and a lot of different fluorescent fixtures. We've outboarded conventional 18-inch and two-foot fixtures, which we use as well as brightsticks in small areas. For more firepower we use Molescents, and in even more cramped spots fluorescent flash lights. I learned a lot about color from shooting documentaries, especially *Lifeline.* You spend a month shooting in a hospital, and you see daylight pouring through windows, long corridors lit with fluorescent, operating rooms with orange light, bright fluorescent in x-ray viewing rooms, and it is all mixed up in long running shots with no chance to correct. It's wrong but it's great.

"For projecting patterns we use a Molelipso, and now we're using a slide projector as well for sharper images. We bounce light off water, mylar, and periactoids (revolving mirrors). We use lighting shutters, flicker machines, and of course TV screen sources. We try to bring as many visual ideas to the show as possible to make it look new and unpredictable. It helps the stories if it has an unfamiliar look."

Goldsmith's father was a strong influence in an oblique way. "He's a painter who works in acrylics, but also in water colors," Goldsmith said. "With water colors you work fast. You get an idea, and it's a stroke, and then another, and another until it is finished. What works is freshness and spontaneity. That's the way we are shooting *Max,* like a water color. You pile up a few ideas, do it fast then move on to the next one."

About half of the show is shot on sound stages at Lorimar Studios, and the rest at practical locations around Los Angeles. For example, there was a scene shot in an abandoned building in Long Beach, where the Rakers game was staged. It was just the right setting, a huge and bleak environment with sagging pillars and paint peeling off the walls in long strips. An empty swimming pool was used as the arena where the contestants played for their lives.

Goldsmith put little fluorescent lamps up on all the pillars, and an ugly yellow key light was used to illuminate the

Now in San Francisco!
Mitchell Geared Head

Supplying Complete Production Packages in 35mm, 16mm & Video

- Camera
- Lighting & Grip
- Production Audio
- Editing Equipment



Adolph Gasser Inc

RENTAL SERVICES
750 BRYANT STREET
SAN FRANCISCO, CA 94107
(415) 543-3888

1988 Rental Catalog Now Available

MOVING?

PLEASE NOTIFY US
6 WEEKS IN ADVANCE

Miss/Mrs./Mr.
Name (please print)

New Address Apt. No.

City State Zip

MAIL TO
AMERICAN
CINEMATOGRAPHER
P.O. Box 2230
Hollywood, Ca.
90028

ATTACH LABEL HERE for address change or inquiry. If you are receiving duplicate copies of AMERICAN CINEMATOGRAPHER, please send both labels. If moving, list **new** address above.

Handsome Binders for your magazines

$8.95 each

Add $3.00 per binder for postage in United States; $4.50 for all foreign orders. California residents add 58 cents state tax. U.S. funds only.

Please send _____ binder(s) to the address below:

Name _____

Street _____

City _____ State _____ Zip _____

American Cinematographer

P.O. Box 2230 Hollywood, CA. 90078

DeSisti LIGHTING

ENGINEERED ILLUMINATION

1109 Grand Avenue
North Bergen, N.J. 07047
U.S.A.
Tel. 201-792-4980
Telex 645466 DESMAR A

ACG

THE RIGHT CHOICE
BEAUTIFUL LOCATION

SHOOT in TAIWAN R.O.C.

FANTASTIC SAVINGS GREAT SHOOTS
FOR YOU NEXT MOVIE, COMMERCIAL OR MUSIC VIDEO
COMPLETE PRODUCTION SERVICES
EQUIPMENT RENTAL
ARRILITE
ARRIFLEX PANSPHERON
ARRIFLEX-3 35mm 130fps
ANGENIEUX. COOKE ZOOM
PRESISION SPEED CONTROL
TIFFEN, ARRI H.M.I. LIGHTS
ZIESS SUPER SPEEDS LENSES
CRYSTAL HIGH SPEED CONTROL

CALL or WRITE
阿榮企業有限公司
Arrow CINEMATIC GROUP
NO.135, CHOW-CHOU ST., TAIPEI, TAIWAN, R.O.C.
TELEPHONE: (02) 3219743 • 3965340

empty swimming pool where the modern-day gladiators fought for another day of existence. Fill was cool-white Molescents.

That was the first episode for which Goldsmith used a Pogo camera. "It's an Eyemo camera on a stick," he said. "It's kind of a poor man's Steadicam. But it's comparatively inexpensive and easy to use. You can work very quickly and sketch in the images you want. There's a video assist capability, so you can see what's happening."

In this sequence Goldsmith used the Pogo camera to show viewers what it's like riding downhill on a motorized skateboard, right at someone who is speeding toward you swinging razor-sharp talons. Its roughness contributes to the overall grittiness of the scene.

Many scenes have to be shot twice, once with a three-quarter-inch video camera, and once on 35mm color negative film. The video images represent what Carter is shooting for live television. Pages are also rich in dialogue, which is more time-consuming to shoot and requires action shots.

"Your lighting for video should be more dramatic," Goldsmith said. "Film can see the subtleties. With video you have to exaggerate and be more vivid."

Whenever feasible, he uses zoom lenses though these are mainly used for variable focus to save time. Primarily, Goldsmith relies on Cooke 5:1 zoom lenses for interiors, and 10:1 for exteriors. There is also frequent use of wide 14mm and 17mm lenses. "We try to use the 300mm as often as possible if for no other reason than they'll take it away from us if we don't."

Episodes are produced in seven and a half days. "It's like the Greek myth where you push a rock up to the top of a hill, and then it rolls down and you have to start all over again," he said.

Goldsmith is rating Eastman color high-speed negative film 5294 for an exposure index of 320 to compensate for the 30 frames per second exposure. The recommended E.I. is 400. "It's logical," he explained. "If the film is running through the camera faster, there is less time for light to expose the image. So, you compensate accordingly. I'd actually prefer to work at a slower exposure index to get a fuller negative for video transfer, however I need the stop."

Most scenes are shot with two cameras for coverage, and three or four are frequently used to record stunts. An Arriflex III BL camera is used for slow-motion sequences, and this footage is recorded at four perforation pulldowns per frame. Since all the footage is transferred to video for editing, this doesn't pose any problems, as long as TVs are kept out of the shot.

The main standing sets are the control room, the board room at Network 23, Bryce's lab, the inside of the BigTime bus, the board room of Network 66 and both Theora's and Carter's apartments. Special sets are also built on a script by script basis.

"It's generally a lot less expensive shooting on location, and you get some wonderful and diverse settings, but I've come to appreciate the flexibility of shooting in a studio where we have more control over lighting," he said.

For daylight exteriors, he used Eastman's medium speed 5247 emulsion, but generally without the Kodak Wratten No. 85 filter prescribed for this situation. "That gives the film a rich blue overcast which seems appropriate," he explained.

For some sequences, he desaturates to almost black and white or sepia tones during the video transfer process.

Almost all the time, Goldsmith shoots with Superfrost filters on his camera lenses. That's something he learned from Caleb Deschanel, ASC. He said, "It's a very delicate look, very clear and clean and realistic. It makes it feel more like a movie. Then, there are times when I remove the filters to get a harsher feel to the film."

A number of daytime interiors were exposed on Eastman color high speed daylight film 5297, which has a recommended exposure index of 250. "It's a stop faster than the 5247 emulsion, and responds quite well to blues and greens of which we have a lot." Sometimes he uses 5297 to get a day look, then using the same basic lighting, but changing the windows and fill, uses 94 for a blue night effect.

"Shooting *Max* is exciting to me because of the opportunity to experiment regularly with the support of a fine crew in interesting sets and locations with no preconceived vision of how things should look," Goldsmith said. "It has already become a metaphor for society, describing a future world of media intrusion not too different from what interested me in my TVTV days. Whether or not it's a popular success, it's had an impact on how we view TV." △

Stock Footage: a Vital Link

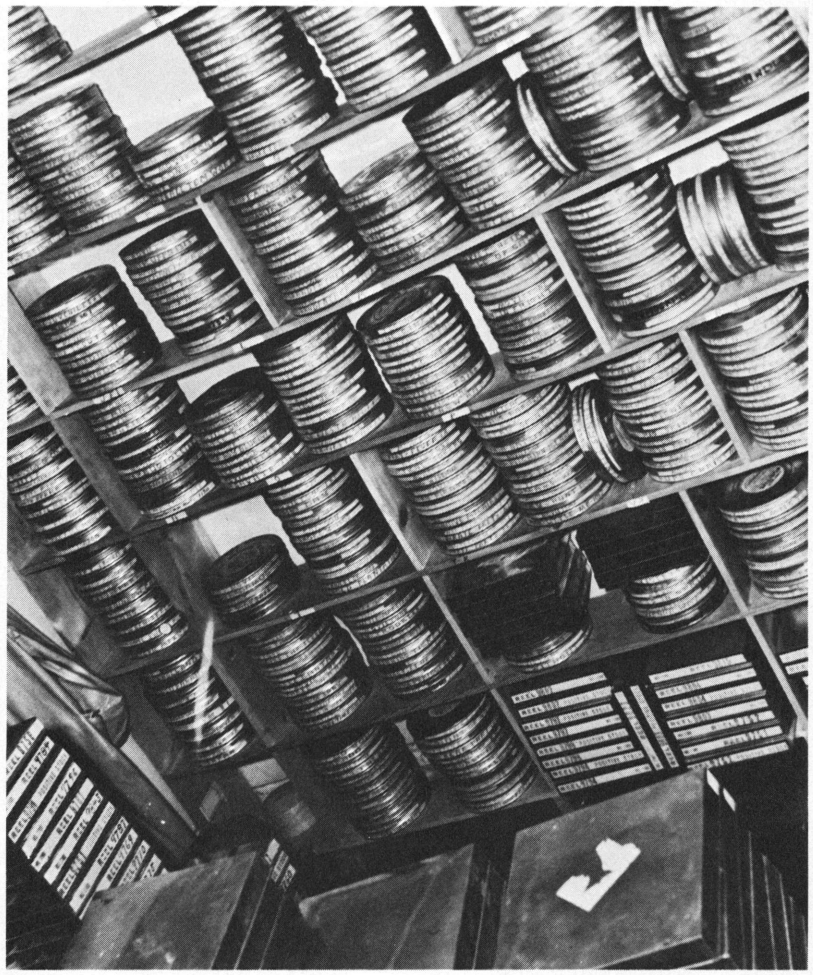
by Anthony Slide

The use of stock footage in both film and television production can be traced back almost to the beginnings of both media. Today, although it is often overlooked and seldom discussed, stock footage continues to play an important role in the production of television programs and commercials, as well as a lesser part in independent feature film production.

The creation and use of stock footage illustrates how the efforts of one producer can benefit another. Studio libraries retain footage which they generate, not only for their own use, but also for the use of outside producers. Independent stock footage libraries generally acquire their holdings from consignees, producers who place film shot for but not utilized in a specific production with the library. In return for so doing, they receive a portion of the license fees charged by the libraries for the use of such footage, have the film catalogued at no charge, and free access to it for future projects. Thanks to the foresight of the original producers, other filmmakers can utilize this footage at prices which are minimal compared to how much it would cost to recreate the production shots they need.

Many free-lance cinematographers also work in tandem with stock footage libraries, shooting film wherever they happen to be. Certainly, any library will welcome footage of exotic locations, but it also appreciates what might, at first, seem mundane film of, say, an Eastern home in the rain, or a small American town with snow on the ground, for stock footage is far more than establishing shots of foreign cities. Producers are far more likely to ask for sample matching shots of homes at day and night or of an East Coast, expensive restaurant. At the height of summer, they will need footage of snow scenes or Christmas decorations. Certainly, there will be calls for cars or helicopters exploding, but there will be a greater demand for a 747 jet flying by day or night, or a taxicab on a suburban street.

Among the footage licensed by Producers Library Service, for instance, during the past year was the mountain cabin in the snow, in which the heroes of *Perfect Strangers* were stranded for two episodes; a deserted carnival at night seen in an episode of *Stingray;* establishing shots of Phoenix for an episode of *Starman;* the fraternity lodge where Cliff went for his initiation in *Cheers;* B52 bombers for *The Wizard;* aerials of Hawaii for *Magnum, P.I.;* aerials of the Pentagon for *Scarecrow and Mrs. King;* and the South American hotel where Bobby stayed as he tried to solve the mystery as to whether his father was really dead in *Dallas.*



Some television series, such as *McGyver* and *Stingray,* make heavy use of stock footage, while situation comedies, such as *Golden Girls* or *Cheers,* may use the odd shot in occasional episodes. Major feature films today seldom, if ever, utilize stock footage, while independent features still rely heavily on it.

The earliest known stock footage library was created by Abram Stone in 1908, and it remained in existence until World War II. Its card index has survived and is presently housed at the Library of Congress. Situated on the East Coast, The Film Library (as it was called) suffered from the Westward migration of the film industry, and by the Thirties was more concerned with the production of series utilizing its own stock footage, notably *Flicker Frolics.*

Because The Film Library was some 3,000 miles removed from Los Angeles producers, a method had to be devised to provide viewing prints which could not be pirated. The answer was the "scratched print," which is still in use today. As Stone's daughter, Dorothy, recalled: "This was a print made from the negative, usually a selection of scenes, and much more footage than that required by a scenario. This work print was scratched from end to end through its middle, so it could not be used. The director or editor who needed

LONDON INTERNATIONAL FILM SCHOOL



Hollywood, Athens, Tokyo, Lagos, Rio, Tel-Aviv, Reykjavik, Sydney, Toronto, Geneva, Hong Kong, London – just some of the centres worldwide where our graduates are making films.

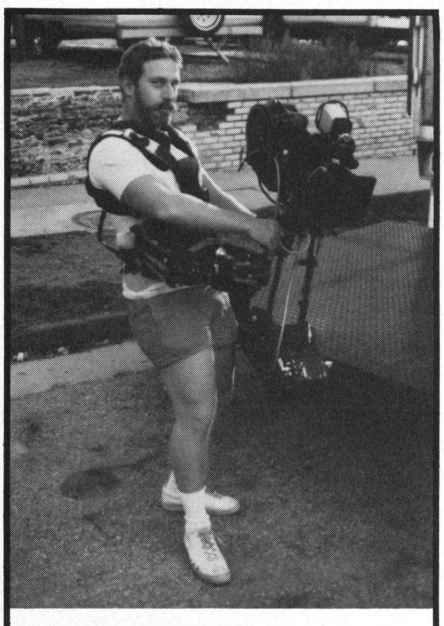
Students from over thirty different countries come to the heart of London's West End to take our two year Diploma Course. Experienced professionals teach all aspects of film making – covering studio feature and location documentary productions in 16mm and 35mm.

Teaching of scriptwriting, direction, camerawork, sound recording, editing etc. ensures a high degree of professionalism. And it must do – Governments, T.V. Networks and Educational Foundations have been sending personnel to us for training for over twenty years.

This intensive Course, demanding hard work and committment, produces over twenty-five films each term – many students working on more than one production.

There are fresh intakes in January, April and September.

Contact: The Administrator, London International Film School, Department AC2 24 Shelton Street, London WC2H 9HP, England. Telephone (London) 01-836 0826



STEADICAM
OWNER/OPERATOR
Rusty Geller
805·498·8844
(So. California)

WM-D6 SONY
CRYSTAL SYNC RECORDER

We offer a remanufactured version of the Sony WM-D6C Walkman for use as a location sync recorder. The unit features an internal 60hz or 50hz crystal sync pulse generator, complete resolving capabilities and is available with a full range of options.



A special 59.94hz version allows the same flexibility of double system film sound to now be married with conventional location video production techniques. A unique video resolver provides for transfers between audio cassette and video tape and for sync locked playback in the field.

The Film Group
P.O. Box 9 203-527-2972
Wethersfield, CT 06109 U.S.A.

footage had the privilege of using it as a rough work print in combination with his rushes and other material. When the final editing was finished, this scratched print was returned to the library with paper markers indicating the actual footage the director or editor wanted to buy. These lengths were then matched to the negative and a duplicating positive was delivered to the purchaser, who had a duplicate negative made and inserted it in the complete production negative."

Then, as now, prints and negatives are matched through the key numbers on the edge of the film. "Scratched prints" are generally utilized today if a producer needs a workprint to determine if a stock shot will work when cut into his production. However, most producers can decide if they need a specific shot by looking at a library's viewing print, and based on that they will order negative. Because it is industry practice for a library to charge a license fee once a negative is pulled and released to a client, "scratched prints" tend to be used less and less, and many laboratories today are unfamiliar with the term.

William K. Everson has written extensively on films of the 20s, 30s and 40s which have utilized scenes from other, earlier productions. However, it should be stressed here that stock footage is not film used in earlier productions but rather film shot for but *not* used in an earlier feature. Strictly speaking, films such as *Isle of Love* from 1922, which re-edits footage from a feature of two years earlier, *An Adventuress,* to emphasize the presence of Rudolph Valentino, is not an example of the use of stock footage. The most important criteria for film to be culled and used as stock footage is that it must not include actors or actresses in the scene. Any footage with recognizable individuals in the shot is deemed "production," and would not be acceptable to a stock shot library. Film in a stock shot library cannot generally be released for use until at least one year after release of the film from which it came or, in some cases, until the original production has been given a network television airing.

During the first half of this century, independent producers had to rely for stock footage on only one major source, the General Film Library, operated by Sidney Kandel and Morris Landres. Because he had so much footage – some 20 million feet – available to the independent producer, Landres was dubbed by *Motion Picture Herald* "the Mayor of Poverty Row." Founded in 1920, with offices in both Los Angeles and

New York, the General Film Library included two earlier libraries, Horsley and Dawes, as well as a complete run of the *Kinograms* newsreel. (Morris Landres died on July 18, 1987, at the age of 96.)

In a 1941 interview with *The New York Times,* Sidney Kandel revealed that the most profitable film in his library was of the sinking of the Australian battleship, St. Stephen, by an Italian torpedo boat during World War I. That one scene, showing hundreds of seamen swarming over the overturned hull of the boat, was licensed to First National for use in its 1927 feature, *Convoy,* for $10,000.

Aside from the General Film Library, the only major, independent stock footage library operating prior to the 1950s was the Elmer Dyer Film Library, founded by the highly regarded aerial cinematographer in 1920, and recently acquired by the New York-based Fossil Films & Photos.

For many years, the major studios did not want it known that stock footage libraries existed on their lots. There was a strong feeling that if the public became aware that a feature had utilized stock footage it would, in some way, diminish the film's production values. Nonetheless, several of the major studios did operate stock footage libraries, with one of the most important being on the Paramount lot under the guidance of Hazel Marshall.

Miss Marshall became Paramount's librarian in 1924, when she left the lab where she was working and went in to help the woman who was supposed to be in charge. When she joined the library the most recent can of catalogued film was numbered 173. When Hazel Marshall retired on June 15, 1975, there were more than ten thousand cans in the vaults. (Hazel Marshall was succeeded by Connie Bulmer, who remains the Paramount librarian.)

Hazel Marshall recalls that there was little restriction on the use of footage in a studio library. Any independent producer who had the money to pay the bills could have access to the footage, although there were certain Paramount producers who did not permit the use of their out-takes for stock footage purposes. The one exception was in the use of process plates, which were strictly for internal use. Wherever a production crew was filming, it was expected to shoot many thousands of feet of process footage for use in later Paramount features.

It was Hazel Marshall who introduced the ten feet minimum charge per cut, which remains a standard in stock footage

PANAVISION CINEMATOGRAPHER'S COMPUTER PROGRAM

Developed by David Samuelson, this unique Software Program provides sophisticated calculations for virtually any situation a cinematographer may encounter.

Supplied with a Sharp PC-1360 Microcomputer, the Panavision Computer Program quickly and with great precision makes calculations for such areas as Filter Factors, Dioptors, Macro, HMI Lighting, Formats, Color Temperature Mired Shifts, Light Balancing, Split Focus, and Hyperfocal Distance, to name a few. Powered by a 5-year Lithium battery, the Panavision Calculator also has a full Accounting Program, allowing for Overtime, Golden Time, and other calculations.

Cost of the Panavision Cinematographers' Computer Program with Sharp PC-1360 Microcomputer is $495.00. Insured UPS Shipping Charges $7.50. California Residents please add 6½%.



BIRNS & SAWYER, INC.
1026 N. Highland Ave., Hollywood, CA 90038 213-466-8211
Cable BIRNSAW TELEX 673280 FAX 213-466-7049

STANTON JIMMY JIB
The most portable & affordable camera boom in existence.



NOW
With Remote Control

ONLY $2,995.00

VIDEO SERVICES UNLIMITED
2720 E. Thomas Rd., Bldg.
Phoenix, AZ 85016
(602) 224-6162

- Fluidly moves camera within its 12 foot range of motion
- Three minute set-up (no tools).
- Breaks down to a 6 ft. 5 in. 45 pound package.

superedit

SE-1600 FLATBEDS
A high-technology, "avant garde" 16 and SUPER 16 post-production and direct release system/lab.



New Product Release
Low-cost Lab-quality processor for film to video transfer.
Inserted between the camera and the Monitor/VCR, the digital processor electronically synchronizes the film frame images with the NTSC TV standard.
Surface mirror and a grainless rear projection screen also provided.
Introductory Price: $695.00

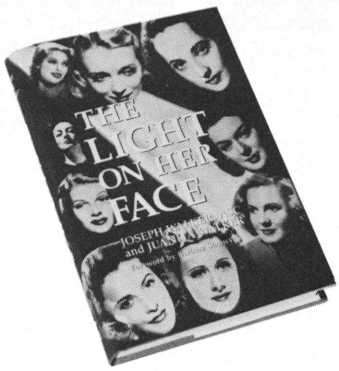
For more information, write to:
SUPEREDIT, 2645 PAULUS, MONTREAL, CANADA H4S 1E9 or telephone: **(514) 334-1449**

CINEQUIPT RENTS AND SELLS

JVC

CINEQUIPT INC.
VIDEO & FILM EQUIPMENT
SALES AND RENTAL
(612) 646-1780
856 Raymond Avenue, St. Paul, Minnesota 55114

The Light On Her Face



"Walker's book is a treasure chest of historical tidbits and anecdotal gems, worth reading by anyone who loves film lore."
—*Robert Osborne*
The Hollywood Reporter

The ASC Press $19.95
P.O. Box 2230, Hollywood, CA 90078
"The Light on Her Face"

Name

Address

City State Zip

☐ Payment enclosed ☐ Charge my Visa ☐ Mastercard

Card # Exp. Date

Signed

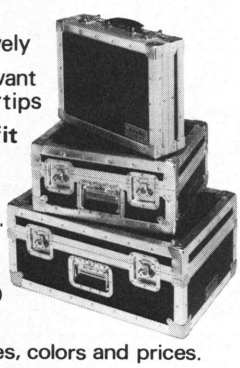
Allow 6–8 weeks for delivery U.S. funds only.
$2 Postage (Foreign $2.50) California tax $1.20

AKS CASES BY EXCALIBUR

STANDARD SIZES FOR EVERY APPLICATION

The professional way to organize and pack **all kinds of s– – –** that

- you need to work effectively
- you always want at your fingertips
- **that won't fit easily into other cases**



THE AKS CASE. YOU WON'T KNOW HOW YOU SURVIVED WITHOUT IT.

Call today for sizes, colors and prices.

EXCALIBUR INDUSTRIES
12427 Foothill Blvd., Lake View Terrace, CA 91342
818/899-2547

PRODUCTION BAGS *DESIGNED BY PRO'S*



...FOR PRO'S

A. TE 01 **CELLULAR TRAVEL BAG** 12½"L × 4"W × 6"D
B. A-650 **TRAVEL BAG** the perfect "Carry-on" 16"L × 7"W × 9"D
C. PRO-1000 the **"ULTIMATE" BAG** 24"L × 12"W × 12"D

***AARON PRODUCTION BAGS** are made of Ballistic Nylon, dense closed cell padding with adjustable dividers, finest hardware, adjustable carry straps and a five (5) year warranty.

FOR ORDERS AND INFORMATION CONTACT: RON HERRES
*** CALL NOW * (800) 437-6667** IN CA: **(800) 537-6667**

aaron MARKETING · ASSOCIATES
SATISFACTION GUARANTEED
15036 DELANO ST.
VAN NUYS, CA 91411
(818) 994-3510

library practice to the present. Any client utilizing stock footage must pay a minimum fee for the use of ten feet of film per editorial cut, no matter how little film he may actually use in that cut. As Hazel Marshall recalls, "Around 1940, I was feeling guilty about sending out such small bills for the use of two or three feet of film at $2.50 per foot. And the accounts department was raising cain about paperwork involved costing more than the film was bringing in." Prior to the Forties, there had been no standardized minimum cut within the industry, although Abram Stone's library did, apparently, charge for a 25-foot minimum.

Studio stock shot libraries were also maintained at Republic, Walt Disney, M-G-M, Universal, Warner Bros., and Columbia; the last three remain active, under the guidance of Jack Rush, Martin Fox and Barbara Goetz. Stock footage from Columbia features is handled by the Warner Bros. Library, while the Columbia Library handles stock footage only from that studio's television productions.

With the demise of Republic Pictures, its stock footage was handled for a number of years by the EVCO Film Library (founded in 1962), and subsequently taken over by the CBS/MTM Film Library when Janet Meyer became its librarian in the mid Sixties. CBS/MTM Film Library, now supervised by Phil Podley, also has the out-takes from two David O. Selznick productions, *A Star Is Born* and *Nothing Sacred.* With her husband, Norman, Janet Meyer presently operates the Cameo Film Library, which represents stock footage from Tri-Star, NBC Productions, Viacom, and others.

Hazel Marshall points out that stock footage libraries came into their own with World War II, and the shortage of raw stock. "Anywhere you could save ten feet of negative stock by using somebody else's establishing shot of City Hall, say, you would go with it."

A further resurgence in the importance of stock footage libraries came in the Fifties with the ready availability of 16mm footage. Prior to that decade no one shot film just for its possible use as stock footage, but with 16mm that became a viable proposition. The Lem Bayley Library, consisting entirely of 16mm film, was founded in 1953. Actor Jon Hall founded his company, the Torrejon Film Library, three years later. Today, two major stock footage libraries continue to offer a substantial collection of footage which they have shot – but in 35mm – Larry Dorn and Carl

Barth's The Stock House.

Changes in the film industry led to the creation of other libraries. Reggie Lyons (son of the ASC cinematographer of the same name) and Jack Reilly, the respective librarians at RKO and M-G-M, decided to form their own company, Producers Library Service, in 1957. The Library was intended to represent stock footage from any number of independent producers, acting as a service to both the consignee and the buyer. It also represents stock footage from the Spelling-Goldberg television series, ABC Circle Films and Orion Pictures Corporation.

The man who more than anyone else made the public and the industry aware of the use and potential of stock footage was Sherman Grinberg, who had entered the film industry in the early Fifties and, in 1957, founded the Sherman Grinberg Film Libraries, which now represent the stock footage libraries of 20th Century-Fox, Allied Artists and M-G-M, as well as the Pathé and Paramount Newsreels, and, since 1963, the ABC network news.

Grinberg utilized his black-and-white stock footage for television series, such as *Biography, Greatest Headlines of the Century, Sportfolio, Battleline,* and *Survival.* Black-and-white film has, of course, ceased to have potential value as stock footage, and, indeed, in the Fifties the libraries were licensing its use at half the price of color stock footage. Sherman Grinberg developed additional uses for black-and-white stock footage, and, with the John E. Allen Company of New Jersey (founded in 1950), remains the major source for such film. Newsreel film is also available at the UCLA Film Archives (the Hearst Metrotone News), at Fox Movietone News in New York, and at the National Archives in Washington, D.C. (Universal and the March of Time). Other, smaller suppliers of black-and-white footage are Archive Film Productions, Inc. and Killiam Shows, Inc., both located in New York.

Sherman Grinberg died at the relatively young age of 54 on January 6, 1982. Happily, his company continues to thrive, both in New York and Hollywood, under the guidance of his daughter, Linda, Nancy Casey, and Bernie Chertock (who has been with Grinberg since 1959).

More than 75 years after the first stock footage was established, stock shot libraries continue to assist, in a very unique way, in the production of film and television. Three major producers of the television era, Stephen J. Cannell, Lorimar-

SINGLE FRAME MOTORS & INTERVALOMETERS

- 12 to 24 VDC power.
- Crystal controlled multiple shutter speeds — 1/16 sec. to over 8 min. time exposure.
- Intervals from 1 FPS to 60 hrs.
- Burst feature 1 to 15 frames per pulse.
- LED frame counter.
- Foreward Reverse Operation.



SCC 300 INTERVALOMETER/CONTROLLER

SINGLE FRAME SYSTEMS FOR: ARRI 16 S & M • ARRI 35 IIC • ARRI 35 III • BOLEX REX 4 & 5 • MITCHELL 16MM • MITCHELL S 35R, MK II • MITCHELL 35 HIGH SPEED • MITCHELL BNC.

Precision equipment for todays demands!

NORRIS FILM PRODUCTS

1014 Green Lane • La Canada, California 91011 • (818) 790-1907

VIDEO TAPE LIBRARY LTD

VTL

(213) 656-4330

VIDEO STOCK FOOTAGE LIBRARY

Thousand of hours of broadcast quality "STOCK" available for your production "NEEDS".

Cities, Sports, Nature, Animals, Seasons, Sunset/Sunrise, Hi-Tech, Aerials, Underwater, Medical, Humor, B/W 1890's-1960's, Americana, Landmarks, Scenics, Action, etc...

1509 N. Crescent Heights Blvd., Suite 2
Los Angeles, California 90046

SCENE *Professional Scene Slates*

TAKE *#1 Quality & Service*

PRODUCER *Alan Gordon Enterprises*

CAMERA *8 Slate Models for Film & Video*

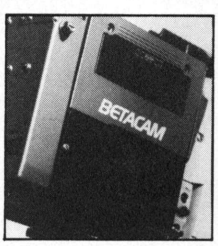
DATE *Free Catalog Available Now*

ALAN GORDON ENTERPRISES INC.

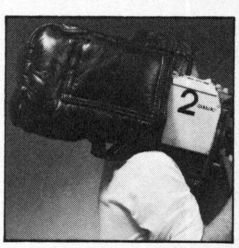
1430 Cahuenga Blvd., Hollywood, CA 90078 • Telephone (213) 466-3561 • TWX: 910-321-4526

BETTER YOUR BETACAM

Beta Heater: bolts on over recording heads to keep the Betacam running perfectly by preventing condensation in adverse weather or air-conditioning. Low power consumption. The simple answer to the condensation problem.



Beta Barney: a foam-lined leather barney to soundproof and protect your Betacam. Allows access to cables, tape, battery, input selector and warning lights, with viewing of level meter and time code display.



OpTex

OpTex, 22-26 Victoria Road, New Barnet, Herts. EN4 9PF, UK.
Tel: 01-441 2199. Telex: 8955869 OpTex G. Fax: 01-449 3646.

NOW READY!
Revised, Updated

Anton Wilson's
Cinema Workshop

Third Edition

Every film student should have it . . .

Every professional must have it!

12 YEARS OF
WISDOM FROM THE
PAGES OF *American* Cinematographer

The ASC Press
P.O. Box 2230, Hollywood, CA 90078 **$14.95**

Please send _____ copies of Cinema Workshop @ $14.95 each. (Payment with order) Add $2.25 postage in U.S., $3.50 Foreign. California Residents at 97¢ State Tax.

Name _____

Address _____

City _____ State _____ Zip _____

☐ Payment Enclosed ☐ Charge my VISA ☐ Mastercard

Card # _____ Exp. Date _____

Signed _____

Allow 6–8 weeks for delivery U.S. funds only.

Telepictures and Aaron Spelling, were quick to recognize their need for stock footage, and have established their own libraries, under the supervision of Richard Wiedner, Hal Nyborg and Wendy Carter. The advent of video offers new challenges to the libraries, but there can be little question that these are challenges which the libraries are willing to meet.

To fill the need for what is best described as "high tech" photography, first Energy Productions and, later, Dreamlight Images were established. They specialize in time lapse photography, as well as offering custom filming and most types of general stock footage. In Miami, Kesser Stock Footage Library provides the type of footage one associates with Florida: underwater scenes, cruise ships and beautiful sunsets. "Beautiful footage" is a good description for the types of shots available from Ventura-based Bill Delaney Films, which specializes in surfing, windsurfing and ocean scenics, and can also shoot stock footage to order.

The same description applies to film from MacGillivray Freeman Films in South Laguna, with its collection of scenics of national parks, sunsets, cloud formations, and sports activities such as windsurfing, hang gliding, ballooning, sailing, surfing, and skateboarding. The work of the MacGillivray Freeman cameramen can be seen to advantage in the 1973 feature, *Jonathan Livingston Seagull.*

On the East Coast, MacGillivray Freeman Films is represented by Film Search, which like another New York-based company, Second Line Search, provides a useful research service, whereby it can check the footage from all libraries. Film Search also has its own library of beauty scenes, sports footage, and time lapse photography, etc. Ron Sawade Cinematography specializes in time lapse and slow motion photography, and provides a library including footage of bald eagles, sunrise and sunsets, clouds, moonshots, and scenics. As its name suggests, Gary Gero's Wildlife Film Library offers all types of animal footage, and Gero also operates Birds & Animals Unlimited (providing live animals and birds for use in films and TV productions).

Typical of the newer, younger libraries is Paula Lombard's The Film Bank, founded in 1984. A full service library, it has excellent footage on nature subjects, special effects, and medical subjects (including operations and microscopy). △

Anthony Slide has authored more than 30 books on the history of entertainment.

VideoGram

by Mike Maginot

The Original Keystone Comedies
(Volumes 1–8)
Produced by Mack Sennett.

Keystone Comedies don't make us laugh as much as they once did. Time, imitation, and the reduction to the small screen (and a small audience), have turned them into curios and artifacts of bygone days.

Fast paced compilations, layering climax upon climax, have led modern audiences to think that Sennett's stock company ran one gigantic chase throughout the silent era. *The Original Keystone Comedies* present another story, characters in plots propelled by larceny, infidelity, and disrespect for all. Subjects meant to shock, as well as amuse the filmgoers of 1914 and 15, for whom these one- and two-reel comedies were made.

Volumes One through Four present Roscoe "Fatty" Arbuckle and Mabel Normand, alone and together, in a variety of roles and situations. Arbuckle shines as the "bad boy" whose most incredible indiscretions are excused for the sake of a laugh. Normand's finest screen moments were yet to come.

Volume Five offers Fatty in drag and some early work by Harold Lloyd and Charles Chase. Volume Six and Seven present Mack Swain in the role of Ambrose. This is the low point of the collection, except for two shorts where Chester Conklin plays Ambrose's nemesis, Walrus. In these Conklin surpasses Swain's weight and mustache with pure comic nuance.

Volume Eight shows off the often forgotten talents of Charles Chaplin's half-brother, Sydney. In the role of Gussle, Sydney Chaplin demonstrates a style somewhat similar and in many ways equal to his renowned younger sibling.

Image quality varies on the 27 comedies represented in this collection. The endearing aspects of these shorts are to be found in their comedic content and the landscapes that provide a backdrop for the slapstick.

These tapes are to be scrutinized, analyzed, preserved, and most importantly laughed at for generations to come.

• • •

Man Facing Southeast
Produced by Lujan Pflaum.
Directed by Eliseo Subiela.
Photographed by Ricardo De Angelis.

Science fiction fans will want to place *Man Facing Southeast* on their video shelf next to *The Day the Earth Stood Still* and *Close Encounters of the Third Kind.*

The story: A visitor from another planet mysteriously appears in a psychiatric hospital. A bored doctor, whose leisure hours are spent watching home movies and playing the saxophone, becomes obsessed with the stranger.

Pedro Aznar's score and Andres Boiarsky's off screen saxophone playing are in harmony with Ricardo De Angelis' lingering visuals. Lorenzo Quinteros, Hugo Soto, and Ines Vernengo are magical in the roles written by the director, Eliseo Subiela.

• • •

The Invisible Man
Produced by Carl Laemmle, Jr.
Directed by James Whale.
Photographed by Arthur Edeson, ASC.

Arthur Edeson's use of light and shadow outshines even the film's best special effects. Odd camera angles and black humor turn what could be junk into a cinematic classic that wears well after so many poor impersonations.

James Whale directs the unseen Claude Rains through the unpredictable madness of his role with incredible skill and panache.

• • •

The Wolf Man
Produced and directed by George Waggner.
Photographed by Joseph Valentine, ASC.

Where the wolf's bane blooms is where any fan of film horror will be. Lon Chaney, Jr., in his best role next to Lenny in *Of Mice and Men,* is the cursed Larry Talbot.

Claude Rains, Bela Lugosi, Maria Ouspenskaya, and Evelyn Ankers are a few of the players whom Joseph Valentine's camera follows through one of filmland's most famous fogs. △

Where do you go,
once you've produced
a video tape?

VIDEO sig

Duplicates

Packages

Markets

Advertises

Sells Your Tapes

And ...

Pays You Royalties!

For information on how to submit your video tape, write to Anne Olson, Acquisitions Coordinator at VIDEO-SIG

VIDEO sig

1030C East Duane Ave.
Sunnyvale, CA 94086
(408) 730-9291
Ask for Anne Olson

863

For your FREE VIDEO-SIG CATALOGUE of over 600 "edutaining" video titles

Call 800-245-6717 or 800-222-2996 (California only)

WINTER SPECIALS

New Equipment:

Bolex Rx-5 Body 16MM	$1995.00
Bolex SBM Body 16MM	$1995.00
Bolex EBM Body 16MM	$1495.00
Bolex EL Body 16MM	$3995.00
Beaulieu 5008-MS Super-8 Schneider 6-70 F1.4	$ 795.00
Beaulieu 4008-ZM4 Super 8, Schneider 6-70 F1.4	$1295.00
Beaulieu 1008 XL 7-56 F1.2 Zoom Lens	$ 495.00
Beaulieu 4008 Nicad Batteries	$ 108.00
Beaulieu R-16 Nicads	$ 259.00
Bauer 715 XL Sound with Angenieux Zoom	$1195.00
ARRI 16-ST Body w/case, VS Motor	$5995.00
Hahnel Super-8 Editor	$ 149.00
Goko TC-20 S-8 Telecine Unit Transfers all S-8 films, including Sound from 16-26 FPS, Flicker Free the Ultimate Transfer System!	$ 695.00
Nagra SN Recorder, Mike, Crystal	$2995.00
Bolex E.B.M. Nicad Batteries	$ 299.00
Bolex 660 Super-8 Camera	$ 369.00
Sankyo XL400-S, S-8 Camera	$ 150.00
Braun N1Z0 Integral 10	$ 795.00
Craig V-16, Film Editor (16MM)	$ 195.00
Craig Super-8 Film Editor	$ 175.00
Bauer T610 Microcomputer S-8 Projector w/Schneider 11-30 F1.1 Zoom	$1395.00

New Fluid Heads and Tripods:

Universal-808 Fluid Head w/Claw-Ball Levelling Wood Tripod	$ 495.00
Universal 16 FX Fluid Head w/Claw Ball Levelling Wood Tripod	$ 695.00
Manfrotto/Bogen Mini Fluid Head and Tripod	$ 119.00
Izumar Fluid Effect Video Tripod	$ 99.00

Used Equipment:

Bolex H16 Body	$ 249.00
Bolex M.S.T. Motor & Battery	$ 395.00
Bolex RX-Body 16MM	$ 350.00
Bolex RX-4 Body 16MM	$ 475.00
Bolex RX-5 Body 16MM	$ 995.00
Bolex SBM Body 16MM	$ 995.00
Bolex EBM Body 16MM	$ 795.00
Bolex EL Body 16MM	$1795.00
ARRI-16-S Body VS Motor	$1495.00
Beaulieu 5008-MS Super-8, 6-70 F1.4	$ 595.00
Beaulieu 6008-5 w/6-70 F1.4 Schneider	$1195.00
Braun N1ZO S-801	$ 795.00
Beaulieu R-16 B, 12-120	$1200.00
Beaulieu 708-EL S-8 Projector	$ 795.00
Beaulieu 4008 ZM-4 S-8 Camera	$ 795.00
Beaulieu 4008 ZM S-8 Camera	$ 575.00
Canon Scoopic Double S-8 outfit	$ 695.00
Nagra IV-L loaded, Case, Mint	$3995.00
Nagra S.N. with Crystal, Case	$1995.00
Elmo 1012 SXL Mint	$ 795.00
Bolex 400 ft Mags	$ 295.00
ARRI-16BL, 10-100 Zeiss, 2 Mags, Matte Box, 24/30 F.P.S. Xtal Motor & Varispeed Digital Counter	$9950.00
CP-16-A 12-120, 400 Ft. Mag. Nicad, Charger, with case	$1995.00
Canon Scoopic-16 outfit	$ 695.00
Seimens 16MM Interlock Projector	$ 995.00
Moviola M79 Jr. Editor	$ 995.00
Moviola M50 Editor	$ 495.00
Bell and Howell 16MM Opt Sound Projectors	$ 95.00
P.G.P. 6 Plate Super-8 Flatbed	$2995.00
Bolex, H-16 Camera w/3 lenses	$ 395.00

We have a huge selection of new and used Bolex, ARRI, Beaulieu lenses, Batteries, Mags, Motors and other accessories.

All prices quoted in U.S. Funds

Shipping and duty extra.
Major charge cards accepted, VISA, M.C., Amx.
"We Ship Worldwide"

Leos CAMERA SUPPLY LTD.

Largest Display in the West.
1055 Granville Street
Vancouver, B.C. Canada V6Z 1L4
604-685-5331

Classified Ads

RATES

Ads set in lightface type are $1 per word. Text set in **bold face** or capital letters (except first word and advertiser's name) are $1.50 per word. Remittance to cover cost must accompany copy. Send ad to Classified Advertising, American Cinematographer, P.O. Box 2230, Hollywood, CA 90078. Deadline for copy is **first** of **second month** preceding date of issue. Subject matter limited to items and services pertaining to filmmaking and video. Minimum $12 per ad.

EQUIPMENT FOR SALE

NEED USED EQUIPMENT? WE HAVE IT, OR WE'LL FIND IT. CALL BILL REITER OR NORM BLEICHER AT PRO VIDEO & FILM EQUIPMENT COMPANY (214) 869-0011.

CINEMA PRODUCTS XR 35mm camera w/tap. 6.1 zoom, 4 mags, 2 batts, 110v power supply, periscope 5"&13" monitor, ½" deck $20,000. Privately owned (818) 353-6401.

ELEMACK CRICKET, 2 wood seats, 2 seat offsets, 2 seat risers, 3 side boards, steering handle $21,000. AC or VR (800) 289-6653.

SONOSAX SX-S, 8 channel mixer, modified for increased gain & faster acting limiters, shipping case, power supply/Ni-Cad charger, many interconnect cables, $7,500. 2 Audio Ltd dual channel radio mikes $2,600/unit. One Audio Ltd single channel radio mike $1,300/unit. AC power supplies, antenna splitter, Ni-Cad charger, special antennas, $350 for all. Package $6,500. Bose 802 speakers w/equalizer, stands & cables $950. Carver 1.5t amplifier (350w/ch) $625. Package $1,500. SQN-3, type M mono mixer w/output cables case & power supply $1,450. Audio services sound cart w/sliding drawer, top, side shelves, fiber shipping case $775. Audio + design ProPack II consumer-pro. line level amp $275. LTM fishpole 14' $200. Carver M-400 amp $125/as is. Shure M-67 mixer $50. Electro-Voice 368 windscreen, (football) $75. Magnasync studio tape degausser, heavy duty $75. 4 pair Sony DR-27 headphones $45/pair, $160/all. Call L. LOEWINGER (212) 226-2429.

PRO VIDEO & FILM EQUIPMENT COMPANY HAS ANTON/BAUER, MILLER, ITE, O'CONNOR, ARRIFLEX, SONY, LOWEL, CP, AATON, NAGRA, JVC, MOLE-RICHARDSON, IKEGAMI, MOVIOLA, MATTHEWS, IANIRO, PANASONIC, ECLAIR, MITCHELL, CANON, GRASS-V, AMERICAN GRIP, USHIO, SENNHEISER, LEADER, TEK, VEGA, STRAND, AMPEX, COLORTRAN. CALL BILL OR NORM FOR DETAILS & PRICES. (214) 869-0011.

2 MOLE 12K HMI w/new style ballast $11,000 ea. Other lighting & grip equipment. PC&E-Chuck (404) 458-8267.

SONY BVW-3 Betacam camera/recorder w/Fuji 14x9 lens w/2X extender/macro AC power supply, case $21,000. (213) 650-6670.

EQUIPMENT FOR SALE

MINT Sachtler 7 + 7 tripod, carbon fiber legs, baby legs, triangle & cases $3,100. Complete 16mm editing room, mint Moviola 6 plate M86-AH flickerless flatbed, instant start/stop $7,000. Splicers, rewinds, mag reader, magnasync transfer, LTM superlite mike pole, Spectra prometer, Pentax spotmeter, Nakamichi 550 sync cassette, ACL 400' magazine. Call (206) 285-3057.

IKEGAMI ITC730-A, FUJINON 9-108/2X complete ENG package, 1½ year old, light usage $6,995. (503) 826-6849.

ZEISS SUPER SPEEDS 12-16-25mm in good condition $9,000 the set. Call Derrick at WHITEHOUSE A.V. (213) 479-8313.

FLATBED Moviola 16mm, model 77 "6-plate." Excellent cond. Call (303) 744-3001.

USED EQUIPMENT; ALL BRANDS, ALL BUDGETS, ALL ON PREMISES. PRO VIDEO & FILM EQUIPMENT COMPANY. CALL FOR OUR FREE CATALOG (214) 869-0011.

ECLAIR ACL package, 2 400' mags, 12–120 zoom, 8–75 FPS motor, orientable finder, batt, charger, case, acc, $5,500. (303) 393-1189.

16MM cameras, projectors & editing equipment for sale. For details & list call JACK at (212) 765-6324 weekdays.

EFX EQUIPMENT, PRINTERS, ANIMATION STANDS, CAMERAS BOUGHT & SOLD, ONLY THE FINEST OF PRE-OWNED EQUIPMENT. LAB EQUIPMENT, CONTACT PRINTERS, FILM CLEANING EQUIPMENT, PROCESSORS. PROJECTION EQUIPMENT 35MM & 70MM ELECTRONIC/SERVO DRIVES DESIGNED & MANUFACTURED, LAMPHOUSES & LIQUID GATES. CUSTOM DESIGNED MOTION PICTURE EQUIPMENT. PIONEER TECHNOLOGY CORPORATION, 1021 N LAKE ST, BURBANK, CA 91502 (818) 842-7165, TELEX 188294, FAX (818) 843-4745.

SAND-SHOT BAGS made to order with your color combos, good prices (612) 522-3509.

PROFESSIONAL POLAROID STILL CAMERAS FOR EXPOSURE & LIGHTING PREVIEW featuring adjustable aperture/shutter speeds & high quality coated optics. Used by cinematographers world wide. Several models to choose from, call or write for brochure. FOUR DESIGNS CO. 6531 Gross Ave, Canoga Park CA 91307. CA (818) 716-8540, outside CA (800) 544-3746.

TIRED OF HIGH PRICES? CALL PRO VIDEO & FILM EQUIPMENT COMPANY. FREE CATALOG. (214) 869-0011.

GOOD-COND. 2 LTR Aaton mags #M1201, M1192 new-type pressure plates $2,150 or B/O. 8mm Zeiss Distagon $450. Ang 9.5x57 $2,100 or B/O. Ang 5.9 $250. Arri-Aaton lens adaptor $125. Sachtler hi-hat $125. 3 Aaton 12v batts & multi-charger $225. 301 East 12th St, #2D, NYC, NY 10003 (212) 674-2042.

U-MATIC blank video cassettes, used, **ONE YEAR UNCONDITIONAL GUARANTEE,** $2.75/ea for six or more, postage included. $3.75/sample tape. MICHAEL BICK CINEMA, 12442 Kling Street, Studio City, CA 91604. (818) 980-4043.

EQUIPMENT FOR SALE

ZEISS Distagon 16mm lens T2.2, excellent cond, Arri to PL mount adapter. GARY ANDERTON (818) 344-3227.

DEVRY 35mm projector parts: chains, brand new $25/ea. Housing completely new $75. I.T.E. fluid tripod head $100. (818) 980-4043.

CINEMA PRODUCTS CP-16-A, 12-120 Ang, two 400′ mags, 2 Ni-cads, charger, case $1,400 obo. (713) 875-0854.

CP-16R, 12-120mm Ang. Studio Rig, 24/30 fps xtal-mint! Includes 5.7mm Century super wide angle lens, 90mm Macro-Kilar, J-5 power zoom, metal location case, full set of filters, $6,500 or BO. Kodak Pageant AV-126TR 16mm sound projector, mint, $500. Spectra Combi II meter $150 or BO. TOM (716) 839-0193.

CP-16R camera with built-in exposure meter, Zeiss 10-100mm T2.8 lens, 2 mags, 2 new batts & chargers, new case, fully re-built 90 day warranty $5,250. Other CP packages available with choice of lenses. Ang 9.5-57mm like new choice of mounts $2,500. Ultra T 9mm T1.35 lens CP or Arri B mount like new $1,100. Ultra T 12mm T1.25 CP or Arri B mount like new $850. Cooke Kinetal 50 & 75mm lenses, Arri standard mount, both like new $375 ea. ITE H 40 fluid head with T40 tripod like new $450. Many other items available, call Derrick at WHITEHOUSE A.V. (213) 479-8313.

HOT HEAD MRK 111 REMOTE HEAD. Director owned equipment comprises: Head, 100′ control cables, Worral type wheels, joy stick control, Hayden zoom & focus controls, 5" monitor & video camera for remote zoom & focus, 15" B/W operator monitor, 110-240 volt & battery power for whole system, **CDN $55,000.** Contact **ROGER** (416) 585-9255 or **FAX** (416) 595-0065.

MILLIKEN DBM-54 hi-speed camera, variable **2-400 FPS** W/No-lube gears, variable shutter & bore-sight, $2,000. TVT (619) 489-6884.

DID YOU NOTICE OUR big classified **BOLEX-SALES-AD IN THE JANUARY ISSUE OF THIS MAGAZINE?** If you want to buy **BOLEX** or **OTHER FILM EQUIPMENT,** as well as **PROFESSIONAL VIDEO EQUIPMENT** at **HUGE SAVINGS,** then you must call, **INTER-CINE-VIDEO CORPORATION at (312) 872-1665.**

I am overstocked with Arriflex "S", Bolex, Cine Special & Bell&Howell 16mm cameras. Please call me for a "real deal" on this equipment. Send for the latest list of all types of production equipment. I buy, sell & trade & need Arri 16 BL's, Guillotine splicers, 35mm cameras, W.A. lenses, etc. JAMES E. WEBSTER, PO Box 5126, Chattanooga, TN 37406 (615) 622-1193, nights (615) 238-4818.

MITCHELL NC for sale, body & L frame, only $4,500 for an excellent camera. SAM (213) 370-6919.

MOVIOLA UD20CS 35mm rebuilt $4,500. UL20CS 16mm $1,500. Arri 16S outfit $2,500. Arri S mags $250. Mitchell 16mm mags, 400′ $79. 1200′ $175. 35mm 400′ $250. CP16A outfit $2,500. LW116 outfit $1,650. Auricon Pro600 special outfit $1,495. Ang. 12-120's from $695. 9.5-95mm from $1,150. Arri 35mm 2B outfit w/28mm, 40mm, 50mm lenses, matte box, motor, mag, cable, battery $3,550. B&H splicer 16/35mm $395. 8/16mm $195. RCA FR35B 35mm Telecine projector $12,500. RCA TP-66 16mm Telecine projector from $7,995. WRE 16mm REC/DUBBER $1,750. Magnasync 2000 16mm REC/dubber $1,200. INTERNATIONAL CINEMA (305) 756-0699. 6750 NE 4TH CT, MIAMI, FL 33138.

McALLISTER dolly, completely rebuilt $6,000 65mm ECN #5247 rawstock $500/100′. Underwater Ikelites 1089 w/quikcharger 4052, unused $245. Moviolas, 35mm S-C $2,000. 16mm K20 $1,000. (619) 581-3114.

CARTONI, FL7 tripod, standard & baby legs, spreader, hi-hat, extras, $2,600. Call Bob or Ray (415) 821-0617.

WANTED

WANTED: Kodak analyst projectors 16mm silent. NATIONAL FILM CO. 10302 Kingspoint, Houston 77075.

WANTED: ARRI BL II or III Zeiss lenses, zoom, dolly, tripods, & other 35mm used production equipment. CFG, 321 West 44, New York, NY 10036 (212) 265-2530.

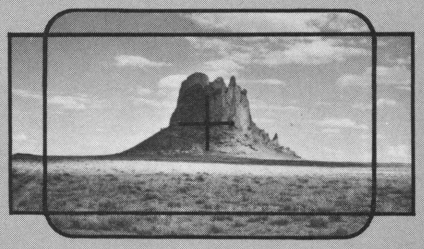
MAGIC BOXES

ALL 2x3x4" SMALL! FOR *YOUR* BAG.

FLICKER TRICK: SIMULATE FIRELIGHT, TV SET, STROBE, WITH ANY TUNGSTEN LAMP.
WEE WILL DIMMER: 2 KW FULL RANGE DIMMING, EVEN DOES SOME NEONS.
WEE DC DIMMER: 10 A DIMMER FOR AUTO LIGHTS, ELECTRONIC EQUIPMENT SUPPLY.
PRACTICAL SWITCH: SLAVES STUDIO LIGHTS OR EQUIPMENT TO A PRACTICAL . . . ON CUE.
FIVE K DIMMER: WOW! 50 AMP, 120 V DIMMER.
MULTI-INTERFACE: USE UP TO 50 WEE WILL DIMMERS WITH FLICKER TRICK, ETC.
SOFTSWITCH: REPLACE YOUR POWER SWITCH AND SAVE BULBS. DIMMER INCLUDED.

MORE MAGIC BOXES & STUFF, WRITE OR CALL:
WILLIAM MCINTIRE ENTERPRISES
PO BOX 4244, Portland, OR 97208 **(503) 286-4193**

RON SAWADE
CINEMATOGRAPHY
STOCK FOOTAGE



THE NEW LIBRARY

CITIES	EAGLES
CLOUDS	SUNSETS
SCENICS	LIGHTNING
SLOW-MOTION	TIME LAPSE

818-769-1737
3724 BERRY DRIVE • STUDIO CITY, CA 91604

NTL
★FREE★
16MM EDGE NUMBERING
WITH DEVELOP & PRINT
AT NEWSFILM LAB
LIMITED SPECIAL!
NEWSFILM LABORATORY, INC.
516 No. Larchmont Boulevard
Hollywood, CA 90004
(213) 462-6814

WE BUY
Film Stock
Video Cassettes
TOP CASH
PLUS 50% OF SHIPPING
RAFIK (212) 475 7884
814 BROADWAY NEW YORK NY 10003

Does your next film project have **special** needs?
JEFF BLYTH
INDEPENDENT FILMMAKER
Qualified to deliver your project on-time and on-budget in any film format—from Script to Screen—Original Idea to Final Answer-Print
20 years of proven, award-winning experience filming above the Arctic Circle to below the Equator—Europe, Asia, West Africa, the South Pacific, Australia, and all of North America
"PORTRAITS OF CANADA"—EXPO 86, Vancouver
"WONDERS OF CHINA"—EPCOT Center, Florida
"THE ETERNAL SEA"—Tokyo Disneyland
Call or write for a video demo reel
802 Foxkirk Rd., Glendale, CA 91206 (818) 244-9202
"It's less expensive to do it right the first time"

Don't shoot your budget...
SHOOT IN MEXICO!
Beautiful locations, fantastic savings, great shoots! They're all yours in Mexico. And Cine South arranges everything. More than 10 years' experience shooting in Mexico. Complete grip/electrical and Arriflex camera packages, pre-registered for shooting in Mexico. And we speak the language fluently. Call Cine South in Houston. (713) 668-2717.

MOTION MEDIA
16mm Magnetic Film Transfers
Sync, Wild, ¼", or cassette . . $16 - hr
Mag Film Stock . . . . . $ .04 - ft
Pic / Sound Sync-up . . . . . $2 - slate
Write or call:
203 W HOLLY · SUITE M15 · BELLINGHAM WA
(206) 676-2528 98225

SUPER BALTAR LENSES
We have the only remaining inventory of BRAND NEW Super Baltars, from 20mm to 152mm in the world todate! Write us or call for prices.
2025 N.E. 151st St.
No. Miami Beach, FL 33162
(305) 949-9084,9085
NCE OF FLORIDA, INC.

CANADA'S LARGEST
LAB AND SOUND
FULL SERVICE
ORGANIZATION
BELLEVUE *Pathé*

MONTREAL	TORONTO	Pathé Sound Studios
2000 Northcliffe Ave.	720 King St. West	121 St. Patrick St.
Montreal, Que. H4A 3K5	Toronto, Ont. M5V 2T3	Toronto, Ont. M5T 1V3
Tel: 514-484-1186	Tel: 416-364-3894	Tel: 416-598-2521

*A DIVISION OF ASTRAL BELLEVUE PATHÉ LTD./LTEE

16MM CINE EQUIPMENT
Specializing in Selected New and Used
BOLEX • B&H • BEAULIEU • CANON • KODAK
Cameras and Accessories
Write or Call for Complete Listing
CHAMBLESS CINE EQUIPMENT
2488 Jewel Street • Atlanta, GA 30344
404-767-5210

SENNHEISER
ELMO
SONY
fostex
lowel
AKG
audio-technica
BOLEX
UHER
superedit
EDITORS
SYNC RECORDERS
Conversions by THE FILM GROUP
dbx
JAC CARPENTER (CINE)
SHURE
P.O. BOX 1321
MEADVILLE, PA 16335—0821

ENERGY PRODUCTIONS
TIMESCAPE™
LIBRARY
ENERGY PRODUCTIONS
2490 BEACHWOOD DRIVE
LOS ANGELES CA 90068
➤ Skyscapes
➤ Cityscapes
➤ Landscapes
➤ Special Effects
➤ Aerial Scenics
➤ Lightning
➤ Landmarks
➤ Underwater
➤ Computer Graphics

Over 500,000 feet of production-ready images available on all formats.
FREE CATALOG
213.462.3310

EXCLUSIVE SOURCE FOR THE COOKE LENS.
ZGC is America's exclusive distributor of Cooke 16mm camera lenses. And the exclusive distributor of Cooke 35mm lenses in the eastern ⅔ of the country.
We also provide expert maintenance of your Cooke lenses by a factory trained optical specialist. Call or write Les Zellan for a FREE catalogue.
ZGC, Inc.
57 Plymouth Street
Montclair, NJ 07042
212/629-6246 201/746-4428

EXPERT LENS SERVICE
CALL CENTURY!
✔All Types Cine/Video ✔Fast Turnaround
✔40 Years Experience ✔Custom Work
Century Precision Optics
10713 Burbank Boulevard N. Hollywood, CA 91601
Ph: (818) 766-3715 FAX: (818) 505-9865

MOVING
When changing your address, please notify us at least six weeks in advance. BE SURE to give your FORMER address as well as your NEW ADDRESS and ZIP CODE.
AMERICAN CINEMATOGRAPHER
P.O. Box 2230
Hollywood, CA 90078

William Sound Service, Inc.
introduces
THE TRUE FRAME SYSTEM℠
The System that gives you the whole truth
The TRUE FRAME SYSTEM℠ offers you the most technically advanced, expedient and cost-effective way to handle your film's post production.
The TRUE FRAME SYSTEM℠ transfers your camera original and 1/4" production soundtrack to 1/2" or 3/4" videotape complete with a time code window at 30 frames per second.
The TRUE FRAME SYSTEM℠ is the only system that also gives you a separate window with your ORIGINAL KEY NUMBERS AT 24 FRAMES PER SECOND (16 frames per foot) all simultaneously programmed onto your 3/4" videotape. This gives your editor the security needed to edit comfortably with assurance of problem-free negative cutting.
WILLIAM SOUND SERVICE, INC.
(213) 461-5321

BEAUTIFUL FILM FOR SALE
INCREDIBLE AERIALS: Cities, National Parks, Natural Scenics.
NATURE'S MAGIC: Sunsets, Clouds, Unbelievable Waves, Seagulls.
ESTHETIC SPORTS: Windsurfing, Hang Gliding, Sailing, Ballooning, Flying, Skiing, Surfing, Skateboarding, Dune Buggying.
MACGILLIVRAY FREEMAN FILM LIBRARY
Box 205, S. Laguna, CA 92677
714/494-1055
Our credits include: "Jonathan Livingston Seagull," "The Shining," "To Fly," "Behold Hawaii," "Big Wednesday" and many more.

WANTED

CINEMATOGRAPHERS: Major stock footage company is looking for beautiful images to represent. (213) 850-1996.

ARRI IIC video assist door, viewfinder extension, power cable crystal motor. ZACH (804) 226-1324.

WANTED: Cameras 35mm & 16mm, sound equipment, fluid heads, editing, lighting, etc. Best cash prices paid. Consignment also available. Contact Pete Anway or Matt Barr, BIRNS & SAWYER, INC, 1026 N Highland Ave, Hollywood, CA 90038. (213) 466-8211.

WANTED Mitchell 35mm high speed cameras & camera parts for models GC, GCS, D, TA, & also Cinerama HS35. Contact FRIES ENGINEERING Inc, 12032 Vose St, N Hollywood, CA 91605. Tel (818) 765-3600.

WANTED Professional motion picture equipment, 16mm & 35mm, cameras, lenses, lights, sound, editing, projection, lab, for outright purchase or consignment. Supply complete technical description & price for immediate reply. Ted Lane, ALAN GORDON ENTERPRISES, INC, 1430 N. Cahuenga, Hollywood, CA 90028 (213) 466-3561.

WANTED: STEADICAMS, CP-16R CAMERAS, ARRI SR, 35BLS, ARR IIC & IIIs, O'CONNOR, SACHTLER, MILLER FLUID HEADS & TRIPODS, PRIME & ZOOM LENSES, NAGRA'S, FOR CASH CONSIGNMENT OR TRADE. CALL DERRICK AT WHITEHOUSE A.V. (213) 479-8313.

ECLAIR CM3 35 mags, motors, cables. ZACH (804) 226-1324.

WANTED: LIGHTING/GRIP EQUIPMENT, ALL BRANDS, WE PAY TOP PRICES. WE BUY – SELL – CONSIGN QUALITY USED VIDEO & FILM EQUIPMENT. CALL NORM OR BILL AT PRO VIDEO & FILM EQUIPMENT COMPANY (214) 869-0011.

SERVICES AVAILABLE

BATTERY REBUILDERS all types. Film, video, photographic, strobe. CHAMBLESS CINE EQUIPMENT, 2488 Jewel, Atlanta, GA 30344. (404) 767-5210. Free catalog.

TIMELAPSE, TIMELAPSE, TIMELAPSE, TIMELAPSE, TIMELAPSE, TIMELAPSE, TIMELAPSE, TIMELAPSE, TIMELAPSE. Custom or stock. Ready worldwide. Most anything you can think of. Realistic rates. **EXPERIENCE instead of EXPERIMENTS.** STUART JEWELL, 2040 Garden Lane, Costa Mesa, CA 92627. (714) 548-7234.

STILL PHOTOGRAPHER available: location scouting, set/publicity shoots, etc. LES SIMON, Box 2287, NY, NY 10009 (212) 724-2800 (service).

CANON, FUJINON, ANGENIEUX, ZEISS, COOKE, SCHNEIDER, FILM & VIDEO LENS REPAIR. OPTICAL ELECTRO HOUSE (213) 204-6577.

UNIQUE video/film supplies! **FREE** catalog. Superior Pix, 323c S Franklin Bldg, Suite 473, Chicago, IL 60606.

ECLAIR - BOLEX - AATON FACTORY TRAINED SERVICE, USED EQUIPMENT & ACCESSORIES AVAILABLE AT PROCAM, 905 NORTH COLE AVENUE, HOLLYWOOD, CA 90038. PHONE (213) 464-2125.

D.P. FOR HIRE New Betacam 3-A. Full 16 package. Lights. Sound. 5 languages. Will travel. $650 daily.

BETACAM VIDEO PRODUCTION CREW & RENTALS. ST. LOUIS BASED RAINBOW IMAGES (314) 894-5536.

DIRECTOR OF PHOTOGRAPHY with production package for hire, reasonable rates (213) 828-5063.

SURPLUS CAMERAS & LENSES WANTED. Send us your tired, your worn 16mm & 35mm Mitchells yearning to be turned into cash. We are also looking for good used 35mm Arri's & other fine cameras. We find buyers for surplus equipment. Contact Jeff at (818) 766-3715. CENTURY PRECISION OPTICS, 10713 Burbank Blvd, No. Hollywood, CA 91601.

SERVICES AVAILABLE

NI-CAD battery packs re-celled. Fast turn-around, one year warranty on new cells. Call Dave Lowing at LOWING PRODUCTS. (616) 538-5828.

STEAM train footage, thrilling color & sound, low cost (717) 838-3668.

QUALITY CAMERA SERVICE: Complete repair & machine shop, parts department & top experienced technicians are available at Birns & Sawyer, Inc. to service your camera, lenses, tripods, & related equipment. Send in your equipment for an estimate to our service dept. Call (213) 466-8211, Peter Anway, BIRNS & SAWYER, INC, 1026 N. Highland Ave, Hollywood, CA 90038.

SITUATIONS AVAILABLE

MANAGER, for established & growing professional audio rental firm. Experience preferred. Must be aggressive, enterprising, cost-conscious. Salary plus commission, benefits. Send resume to SOUTHEAST AUDIO, 1791 Blount Rd, Pompano Beach, FL 33069.

TECHNICIAN ARRIFLEX/ZEISS. If you are a top Arriflex Camera or lens technician looking for new challenges involving the very latest equipment, we have the job for you. Film Facilities Ltd. are New Zealand's premier motion picture rental & sales organization with a quality technical service facility. We service both local productions, as well as an increasing offshore contingent from L.A. The position is attractive as our rental fleet is new, our involvement with the industry is close, & we are currently embarking on a major expansion of our technical facility. Beyond the working situation, New Zealand offers unique leisure activities as well as offering an attractive family environment. Please write with details, experience, etc. to FILM FACILITIES LIMITED, Box 6698, Wellington, NEW ZEALAND, or phone 64 4 844-192 or FAX 64 4 843 774.

ADMINISTRATIVE ASST — self motivated, pleasant, all types office work incl phone, willing to accept responsibility, organized, cost-conscious WP for professional audio production & studio. Send resume to SOUTHEAST AUDIO, 1791 Blount Rd, Pompano Beach, FL 33069.

MISCELLANEOUS

FILMMAKERS. The Filmmakers Guide to Festivals & Competitions 1988 is now available. Over 55 festivals listed. Only $4 plus $1 postage. US funds, money orders only. Send to HEARTLAND PICTURES INC, VANCOUVER, B.C., CANADA, V6K 2B4.

1,000,000 Videomovies/soundtrack LPS! Video catalogue $1. Soundtracks $1. RTS/AM, Box 1829, Novato, CA 94948.

BOLEX ACCESSORIES

- 24/30-Frame Sync. Camera motor 115V
- Va. Speed Battery Camera motor 24V
- 400-ft. Magazine w/400' counter in camera
- Intervaltimer—Range 1½ sec. to 36 min.
- Animation motor. Fits all H-16 models

(714) 650-7299

Write for Bolex Accessory Catalog

STEVENS
402 KINGS RD.
NEWPORT BEACH, CA 92663

PHENOMENAL FOOTAGE.

It's just a phone call away. Silent films, features, newsreels, documentaries, music footage and more. From our huge collection of historic stock footage. Our computerized system assures fast access. Call or write for a free brochure and sample reel.

Archive Film Productions, Inc.

Dept. AC, 530 West 25th Street New York, NY 10001 USA
212/620-3955 Telex: 822023

DON'T LOSE YOUR HEAD!

We will renew your Fluid Head and overhaul it completely to be BETTER THAN NEW! Write or call us for our super fast service and low prices.

2025 N.E. 151st St.
No. Miami Beach, FL 33162
(305) 949-9084,9085

NCE OF FLORIDA, INC.

LARRY EDMUNDS BOOKSHOP, INC.

"World's Largest Collection of Books on the Cinema & Theatre"

NEW AND OUT-OF-PRINT

MEMORABILIA-POSTERS-STILLS

World-Wide Phone & Mail Orders
VISA/MASTERCARD BOOK LIST AVAILABLE

6658 Hollywood Boulevard, Hollywood CA 90028
Phone (213) 463-3273

Also at the 'Actors Center'
11969 Ventura Boulevard, Studio City CA 91604
Phone (818) 508-7511

QUALITY LENS SERVICE

Fujinon ■ Canon ■ Angenieux ■ Cooke ■ Zeiss ■ Schneider ■ Etc.

Now Available From:

WHITEHOUSE AUDIO VISUAL
11511 West Pico Boulevard
Los Angeles, CA 90064 (213) 479-8313

16mm Super—8

Color Reversal Processing
VNF-ME4-ECO
B/W Reversal Processing
Same Day Service
Duplicate Prints
Video Transfer

Write or Call for Price List

YALE LABORATORY
1509 N. Gordon Street
Hollywood, CA 90028
(213) 464-6181

VISTASCOPE CORPORATION

Wide Screen Theatre Systems

1726 Taylor Street NW • Atlanta, Georgia 30318 • (404) 351-3618

48ft. MOBILE CINEMA, with 24ft. SCREEN
HELICOPTER CINEMATOGRAPHY
"TO FLY" and "FLYERS" in VISTASCOPE

VISTASCOPE 2 perf, PRODUCTION
.980
.367
EDITING—PROJECTORS

DAN MERKEL MEANS ACTION
Water Photography

STOCK FOOTAGE LIBRARY
SURFING
SAILBOARDING
OCEAN WAVES
AND MORE!

(805) 648-6448 / Local 659
Box 722, Carpinteria, CA 93013

Dreamlight IMAGES

Explore the magical imagery within our
STOCK FOOTAGE LIBRARY
Production ready elements in all formats:
TIME-LAPSE, HIGH-SPEED, MACRO,
MICRO, REAL-TIME:
suns, clouds, moons, flowers, cities,
aerials, effects, underwater, vintage,
nature, wildlife, sports, etc.

FREE CATALOG

932 North La Brea Ave., Suite-C
Hollywood, CA 90038

213-850-1996

TEXCAM
INC.

Covers the state with offices in Dallas and Houston. TEXCAM can quickly respond to your needs with the latest in Arri 35 BL-4 • Zeiss Primes • Arri 35-3 • Cooke Zooms • Sachtler • Tiffen • Arri SRII • Micro Force • Tyler • Mitchell • Canon • Cinematography Electronics • CEI • Jurgen's • G&M Power Products • Harrison & Harrison • O'Connor • Angenieux • Worrall • Arri BL-3 • Ronford • II-C PL • Century
Rental and Sales

TEXCAM INC.
300 Shepherd #B
Houston, TX 77007
713-862-7055

TEXCAM INC.
3226 Irving Blvd.
Dallas, TX 75247
214-630-1487



Don't Shoot!

We have the greatest directors in stock.

Award winning footage from around the world.

35mm color negative to vintage B&W.

FILM SEARCH
232 Madison Ave., New York City, NY 10016
(212) 532-0600 • Telex 4973657 FILMS
1449 So. Rexford Dr. #7, Los Angeles, CA 90035 • (213) 277-5880

CINE SOUND 5
SOUND PRODUCTION EQUIPMENT
SALES • SERVICE • RENTAL

Dealers for:
MICROPHONES: AKG, Neumann, Schoeps, Shure, Sony, Tram, Sennheiser, Beyer • WIRELESS: Micron, Vega, Sony, Audio Ltd. • MIXERS: Sony, Shure, 6 Input Mono By AVD • RECORDERS: Used Nagras, TC-DSM, WM-D6, PMD-430, UHER, By Film Group • MIC. POLES: LTM, LWS, Micron • Video Transmitters • Power Supplies • Electronic Slates • Beyer Head Sets • Windscreens, Shock Mounts By LWS • Kangaroo Cases
King Walkie-Talkies • Etc.

We also Buy, Trade and Sell Used Nagra, Vega Micron, Sennheiser, etc.
We Rent New Motorola Walkie Talkies

SAVE MONEY.....BUY FROM US
3815½ W. Burbank Boulevard
Burbank, CA 91505
(818) 845-6496 — (818) 348-9403

Advertiser Index

Aaron Marketing Assoc: 86
A.F.E.R.: 63
Alan Gordon: 57, 74, 87
Anderson, Howard A: 24
Archive Film Prods: 93
Arriflex: 17
Arrow Cinematic Group: 82

Band Pro Film/Video: 14
Barbizon Electric: 30
Bellevue Pathé: 91
Birns & Sawyer: 23, 85
Blyth, Jeff: 91

Camera Service Center: 19
Carpenter Sales: 92
Century Precision Optics: 80, 92
CFI: 11
Chambless Productions: 91
Cine Sound 5: 94
Cine South: 91
Cine Video: 53
Cinema Electronics: 15
Cinematography Electronics: 75
Cinequipt: 85
Clairmont Camera: 8-9
Color Magic Filters: 31
Colt Helicopter: 10
Columbia College: 22

DeSisti Lighting: 82
Dreamlight Images: 93
Du Art Film Labs: 21

Egriptment: 66
Energy Productions: 92
Excalibur Industries: 86

Film Group: 84
Film/Video Equip. Service: 72
Film Search: 94
Fries Engineering: 71

Gasser: 81
G.B.C.T.: 80
Gearfax Ltd.: 32
Gene Young Effects: 7
General Camera: 1
General Electric Co: 42-43
Great American Market: 20

Harrison & Harrison: 65

Image Devices: 69
Interformat: 41
International Film Workshop: 75

Kangaroo Video Prods: 14
Kingsway Film Equipment Ltd: 66
Knox, David: 4

Larry Edmunds Books: 93
Larry Huston Studio: 66
Lee Filters: 49
Leonetti Cine Rentals: 18
Leo's Cameras: 90
Light-Wave Systems: 6
London Int'l Film School: 84
Lowel Light Mfg: 2
LTM Corp: 5

MacGillivray-Freeman: 92
Matthews: 32
Merkel, Daniel: 93
Mole-Richardson: 63
Motion Media: 93
Moviecam: C-2
Musco Mobile Lighting: 79

NCE of Florida: 91, 92
New Mexico Film: 6
Newsfilm Laboratory: 91
Norris Film Products: 87

Optical Textile: 75, 87

Panavision: 26-27
Peter Lisand Corp: 33
Peter Robinson Studios: 70
Production Serv Atlanta: 52

Rafik: 91
Red Line: 12
Rick Raphael: 25
Roessel Cine Photo: 4, 30
Ron Sawade: 91
Rosco: C-3
Rusty Geller: 84

Silverman, Stan: 85
Sloan, Bob: 24
SMS Productions: 74
Stanley J. Brooks Co: 33
Stevens Engineering Co: 93
Super 8 Sound: 59
Super Edit: 85

Technological Cine/Video: 71
Texcam: 94
The Camera Department: 69
TVC Laboratories: 22

Ulland, Bob: C-4
Universal Fluid Head: 70

Video Serv Unlimited: 85
Video Sig: 89
Video Tape Library: 87
Virginia Film: 13
Vistascope Corp: 93

Whitehouse Audio-Visual: 92
Wm. McIntire Enterprises: 91
William Sound Service: 92
Wisconsin Film: 65

Yale Laboratory: 93

ZGC, Inc.: 92

By invitation. . .

The American Society of Cinematographers

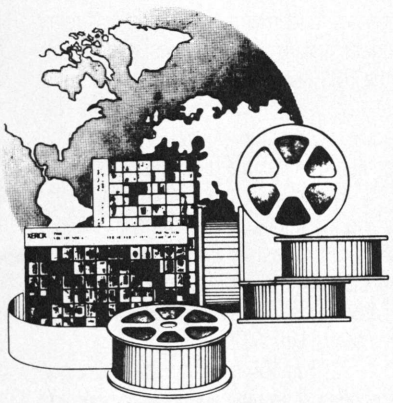
has members available to conduct seminars on the many phases of cinematography.

"Our expertise in this field is an amalgamation of experience and artistry," says Harry Wolf, President, A.S.C.

Call and let us help you teach others.

Ask for Jean Turner
(213) 876-5080

This Publication....



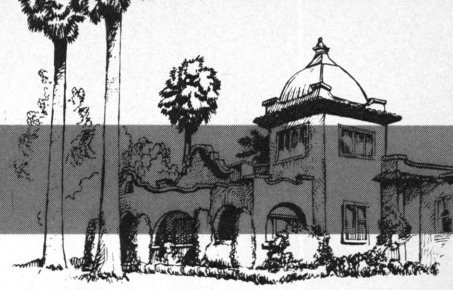
is Available in MICROFORM

For Complete Information
WRITE :

University Microfilms International

Dept. F.A.
300 North Zeeb Road
Ann Arbor, MI 48106
U.S.A.

Dept. F.A.
18 Bedford Row
London, WC1R 4EJ
England



ASC Awards Set for March 6

The Second Annual ASC Awards Banquet for Outstanding Achievement in Cinematography will be held March 6 at Universal City Studios.

Individual awards will be given for outstanding artistic achievement in cinematography for a 1987 theatrical length motion picture, a motion picture produced for a single episode of a television program, and a motion picture produced for a television special or for a mini-series.

"Cinematography is a unique and powerful art form," said Harry Wolf, president of the American Society of Cinematographers. "This is our way of recognizing and encouraging those individuals who are establishing the current standards for artistic excellence."

There will also be a Lifetime Achievement Award given to one or more individuals based upon their body of work and other contributions to the art of cinematography.

"Many people can make one, two or three great films," said Wolf. "But only a handful of people have consistently shot great films. This Lifetime Achievement Award will be reserved for those individuals who have consistently made unique contributions to the art of cinematography over a lifetime."

The first ASC Awards Banquet for Outstanding Cinematography was held last year. Jordan Cronenweth, ASC, won the first Outstanding Achievement Award for a motion picture of theatrical length for his work on *Peggy Sue Got Married.* The two television categories and the Lifetime Achievement Awards were added this year.

"Television film is a powerful art form, which reaches many millions of people," said Michael Margulies, ASC, who heads the Awards Committee. "Some of our best cinematographers are shooting film for television, and they have helped to make it a better, more artistic medium. They deserve our consideration."

All active ASC members are eligible to participate in the nominations of candidates for Awards for Outstanding Cinematography. The only criterion is that the film had to be screened in a Los Angeles theater or on U.S. television for the first time in 1987.

Ten nominees will be selected in each of the three categories. Selection committees made up solely of ASC members will then screen all preliminary nominations and choose the five finalists in each of these three categories. All members are eligible to participate in the selection of the winner in each category.

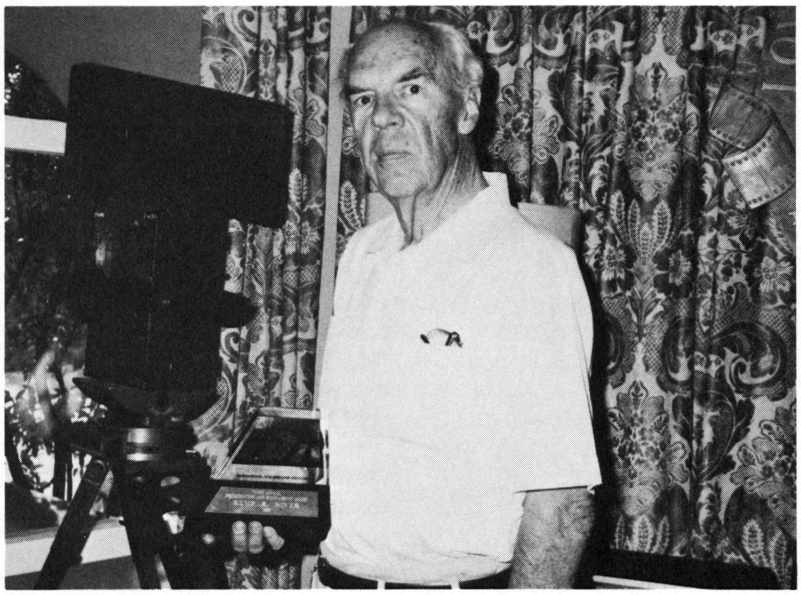
"There are other very prestigious awards which recognize artistic excellence in cinematography, starting with the Oscars and the Emmys," said Margulies. "We have no intention of competing with any of them. In fact, last year four of the five ASC nominees were also nominated for Oscars for cinematography."

However, Margulies noted that this is the only award for cinematographers where nominees and winners are selected solely by their peers. "We believe that by giving this recognition to our peers, we are encouraging a commitment to artistic excellence in both theatrical and television filmmaking," he said. "That has always been the purpose of the American Society of Cinematographers."

Lifetime Achievement Award winners are selected by vote of the ASC Awards Committee.

The ASC was founded in Hollywood in 1919. It is the oldest organization of its type still active in the motion picture industry. There are currently some 180 active members worldwide. △

Third Annual IDA Awards



Kemp Niver with his award.

The International Documentary Association held its third annual awards luncheon in November. The event, once again with Jack Haley, Jr. as the master of ceremonies, turned the spotlight on an important and passionate group of filmmakers from around the world – documentarians. This group, perhaps more than others, is very much aware of history. So the awards go not only to present filmmakers, but to others whose entire careers are full of valuable contributions to the art or technology of the documentary film.

Receiving the IDA Preservation and Scholarship Award was ASC associate member and museum curator, Kemp Niver. Niver began working with the Academy of Motion Picture Arts and Sciences in 1951 in an effort to save and eventually re-photograph "paper prints" of some of the earliest films.

Paper prints were contact prints made from original nitrate films and in many cases they were the only remaining copies of films. Niver and his staff worked for ten years to convert the entire motion picture archives of the Library of Congress collection of paper prints into film. Many of the films preserved were documentaries. Upon receiving his award, Niver said that there was no finer award than the "recognition of your peers."

Also honored, with the IDA Career Achievement Award, was filmmaker Ricky Leacock. Leacock's career has spanned more than 50 years and covers every type of documentary filmmaking, but he is best known for his pursuit of the *cinema verité* style. In a field where the definition of documentary film has divided households for years, Leacock has made his own definition with such films as: *Canary Bananas* (his first, 1935), *Louisiana Story* (with Flaherty, 1946), *Jazz Dance* (1954), *Happy Mother's Day* (1963), *Monterrey Pop* (1967) and scores of others. Leacock is primarily a cameraman, but also served as editor, co-director, producer, and writer.

In an evening program focusing on his life's work, Leacock explained that no one likes to make the kind of films he likes. He is simply interested in letting his audience know what it is like to be…wherever. He currently teaches film and video at the Massachusetts Institute of Technology.

Receiving the five Distinguished Documentary Achievement Awards were an international group of filmmakers that well represented the diversity of the medium. The five were chosen by the membership from a field of 16 nominees. The awards are given with no ranking and began with *Chasing a Rainbow: The Life of Josephine Baker.* The British film, produced by Mick Csaky, traced the life of the legendary performer in interviews, archival footage, stills and music. *Eyes on the Prize: America's Civil Rights Years* was part of a series produced for PBS by Henry Hampton. The award winning segment chronicled the march to Montgomery from Selma, Alabama, in 1965.

From Russia, in this era of glasnost, came *Is It Easy To Be Young?.* This film tells the story of modern Latvian teenagers and the problems of growing up in the USSR. It was produced by Yuri Podniek. *Threat,* a film from Sweden, widened the international flavor of the awards, and in electrifying words and images, showed the end of the Laplanders' way of life as a result of the fallout from Chernobyl. It was produced by Stefan Jarl.

Finally, another award winner from Britain, the highly controversial *Thy Kingdom Come…Thy Will Be Done* traces the rise of fundamentalist religion and televangelism in America. Originally produced for the PBS series *Frontline,* in a dramatic move last year, it was dropped from the schedule. An edited version is being rescheduled for possible broadcast this year.

New to the awards this year was the institution of the David L. Wolper Student Documentary Achievement Award. A check was presented by Wolper to Stanford grad student Tina DiFeliciantonio for her film, *Living With AIDs.*

The IDA was founded by Linda Buzzell almost six years ago to promote and support the documentary film and its makers. The awards heighten public awareness of the form and as John Spence, manager of worldwide marketing for Eastman Kodak said, "The non-fiction film and video producer is rarely singled out for recognition or glory, however they play a very significant role in our society. They are carriers of the torch of enlightenment."

—Nora Lee

IT'S A JUNGLE OUT THERE.

What with all the new light sources lurking about, every location has its own breed of lighting monsters. Besides daylight and tungsten, there's fluorescent, HMI, Mercury, Sodium, CSI, and CDI.

That's why Director/Cinematographer Lou LaRose never ventures out without his "Jungle Book" – Rosco's Cinegel swatchbook for location lighting.

Lou LaRose balances light sources right on the set with Cinegel's color correction filters. He considers Cinegel to be an essential tool in his award-winning work on TV commercials and special TV network productions.

By correcting the lighting on location, cinematographers avoid embarrassing scenes at the dailies. Gone is the need to explain "green faces". Gone is the need to "fix it in the lab".

The Academy Award winning gel line has tamed Lou LaRose's lighting monsters, as well as those on thousands of other motion picture and TV productions. It will do the same for you.

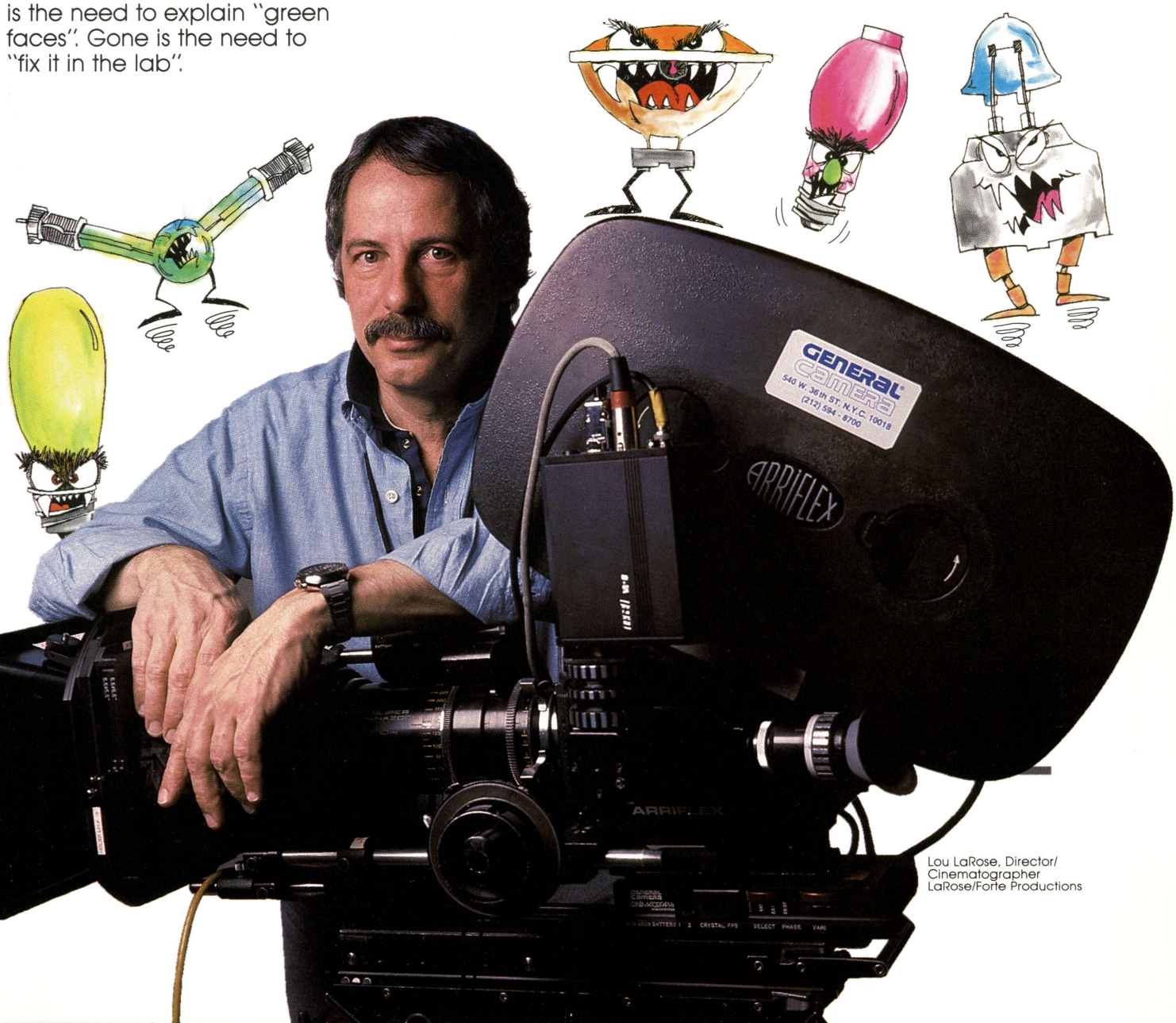
Get our "Jungle Book" swatchbook and "Lighting In The Jungle" handbook. Both are free at your rental house, Rosco dealer, or Rosco.

It's a matter of survival.

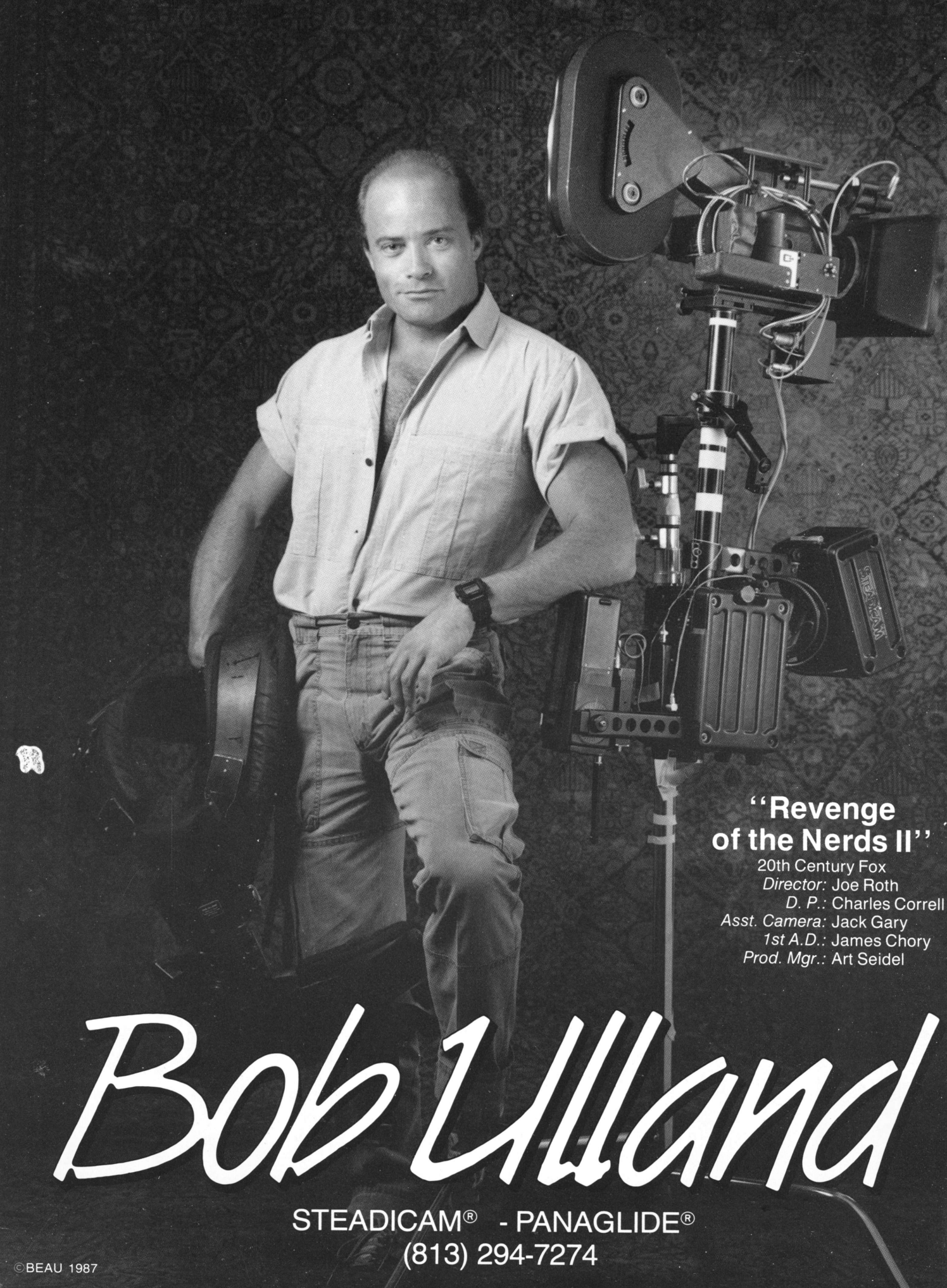


rosco

36 Bush Avenue, Port Chester, New York 10573 (914) 937-1300 Telex: 131472
1135 North Highland Avenue, Hollywood, California 90038 (213) 462-2233
1271 Denison Street #66, Markham, Ontario, Canada L3R4B5 (416) 475-1400
Also in London, Madrid and Tokyo



Lou LaRose, Director/
Cinematographer
LaRose/Forte Productions


"Revenge of the Nerds II"
20th Century Fox
Director: Joe Roth
D. P.: Charles Correll
Asst. Camera: Jack Gary
1st A.D.: James Chory
Prod. Mgr.: Art Seidel
Bob Ulland
STEADICAM® - PANAGLIDE®
(813) 294-7274
©BEAU 1987